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REMARKS UPON SOME OF THE LEGAL RESPONSIBILITIES OF MEDICAL MEN.—Being the Valedictory Address of the retiring President of the Illinois State Medical Society, read at the Annual Meeting in Paris, May 1860.

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The medical and surgical practitioner of generous and honorable feelings, is apt to think that his patients will feel towards him as grateful for attention to them in times of distress, as he in turn would feel if in like trouble, and attended with equal assiduity. Perhaps it is not claiming too much for human nature to say, that this expectation is not unfounded and not disappointed with regard to the better portion, and it may be the larger portion of patients. The physician often meets with expressions of gratitude for services rendered, where he sees on reviewing the case that he ought to have treated it much better, and he feels a little pricked that he should be so unworthy of the expressions of gratitude and confidence.

Estimating the world by the better portion of it, and stimulated by testimonials of appreciation for services rendered to the grateful and to the just, he is liable to be thrown off his guard, and to fail to surround himself with those provisions and proofs which he would never neglect if he stopped in every case to reflect that it might become the subject of legal investigation. His education fails to impress him with the importance of being able to prove what he says and does, and the necessary habits of his daily professional life still further

confirm this want of caution. Many of his most important consultations with his patients are strictly private, and it becomes a repulsive thought to him, that when he goes to relieve distress, and remove or prevent deformity, or save life, he must take along with him outside witnesses by whom he can prove what promises or proposals he makes, and what measures he resorts to. It is hard, indeed it is nearly impossible for him to adopt the commercial maxim, to treat every man as a rogue until he proves himself honest; to regard every patient as an ingrate or a villain, until he shows by his honorable conduct that he is endowed with honorable and generous feelings.

The doctor is under the further temptation to hold out to the patient, and the immediate friends by whom he is surrounded, the best view of the case. He well knows the depressing effect of an unfavorable prognosis gloomily expressed, and it requires a cold calculation to make the case as bad as it is, or worse than it is, in presence of the patient; for the professional and legal advantages which may afterwards result to him, though the chances of these advantages may lessen the patient's chances for recovery. Many a man will die if his physician thinks so, who will at the same time recover if his doctor thinks so, or if he tell him so.

The physician is led on by these habits and these considerations, thinking, saying, and doing the best things for his patients, never taking caution to guard or to prove his words or his deeds; and he is some day surprised to find himself overwhelmed with a slander, and he looks about him for his proofs wherewith to refute the falsehoods industriously circulated against him, and to his astonishment he finds that he has no proofs but his general character. He can only set his general conduct against the particular lie. He pays little attention to this, thinking it easier to live down a lie than to attempt its formal refutation, especially as he has been utterly careless to guard himself by testimony during the progress of the particular transaction. He learns no lesson of caution from this exhibition of malice. He lives and works, and is believed and appreciated, while the lie is forgotten, and the slanderer is despised: but he is some day brought to a stand

by a prosecution, which, if successful, will sweep away his hard earnings through a course of years, and rob him of his well-earned reputation, which to him is the means of future employment and livelihood. He looks about him for his witnesses, and he finds that out of pure goodness he promised too much in the case, and failed to tell all he knew of the dangers and difficulties, in order that the patient might have the greatest solace during the period of confinement and suffering. He finds that the facts in his favor can only be proved by his own assertion and that of the prosecuting parties, so that in law they might as well not be facts. He ascertains that the facts which he can prove are of such a nature as not readily to be appreciated by the members of a jury not especially instructed in the art, and he fears that out of jealousy a neighboring practitioner will take advantage of his privileges before the jury to injure the reputation of his unfortunate rival.

He finds that the public expect perfection of result, unless the practitioner has distinctly stated the difficulties which make this uncertain or impossible, and that the legal tribunal will hold him to this strict rule, unless he can prove by competent witnesses that he has guarded himself, or by the testimony of experts that this perfection of result is under the circumstances impossible.

Where this perfection of result is not secured, he finds himself, in many instances, held socially and professionally responsible, unless his prudence has been such as to be offensive to the feelings of honorable patients, and on the verge of impairing his efficiency and usefulness as a practitioner.

In this country a civil or a criminal prosecution based upon alleged wrong-practice in medicine, surgery, obstetrics; in the practice of the apothecary, and in all other arts, sciences, and trades, is carried on before a jury, none of whom are required to know by preliminary education or training, anything about the matter which is brought before them.

The question whether one telegraphic machine is an infringement upon the patent right of another, may happen to be tried before a jury of farmers and others, not one of whom may

have been instructed in mechanics and electricity. A question whether an operation in surgery has been properly performed under proper circumstances, is generally tried before men who are ignorant of the rudiments of anatomy and of all other branches of medical science. This system looks absurd enough, and would leave the decision almost entirely to chance, or to the trickery of the lawyers, but for the relief found in the admission of testimony by "experts." In any question before a jury, involving any art or science not supposed to be familiar to ordinary men, the parties to the suit are permitted to call before the jury persons who are supposed to be familiar with the principles and rules of the particular art, science, or trade in hand, and to express their opinion in answer to hypothetical questions. The expert upon the witness stand, is sometimes permitted to read from books upon the particular art or science in support or explanation of his own views, but according to Elwell, in his recent work on malpractice, there is no uniform rule with regard to this in our courts. This testimony by reading from books is as often rejected as admitted. (Elwell, p. 331.) Were a jury of men uneducated in the matter in hand, capable, during the few hours that they listen to explanations by experts, of getting clear ideas of the art or science attempted to be explained, the remedy would be nearly perfect. It may have taken years for the expert to acquire the knowledge upon which he bases the opinions he gives to the jury, and he may find it necessary to his own truthfulness and reputation to guard his opinions with many provisos.

These ideas and opinions, many of which have no common words by which they can be expressed, may fall upon the ears of a jury like a talk in an unknown tongue.

That the verdicts of juries thus constituted, though instructed by the testimony of experts, is extremely uncertain, is proved by daily observation. In illustration, I quote in substance two cases from Elwell's work on malpractice.]

Pages 81-82. A man had his leg crushed by a log rolling over it. The injury was so severe that the surgeons amputated the limb to save the man's life.

Some years afterwards the bones were dug up and made

the basis of a prosecution for the recovery of ten thousand dollars damages.

Eminent counsel were found to undertake the case for a portion of the spoils. Several long trials were had, the juries not agreeing. Depositions were taken in New York, Philadelphia, and Washington, involving great expense. No judgment was obtained against the defendants, but the litigation was ruinous to them. Had these surgeons made the hazardous attempt to save the limb, and had they succeeded to a tolerable degree, then they would have been sued for not performing a perfect cure.

In another case a young man fell with his leg beneath a colt, resulting in a compound comminuted fracture of the tibia fibula, rupturing an artery, and so injuring the leg that the foot became cold. The surgeon made the hazardous but successful attempt to save the limb. Extensive suppuration and sloughing ensued. Extension was out of the question.

The patient recovered at length, through the most assiduous attention on the part of his surgeon, with a limb half an inch shorter than the other, and a "healing" ulcer over the instep.

The surgeon received from the authorities twenty dollars for his services, the patient being a pauper. So soon as the patient could travel, he found his way to a lawyer and commenced suit against the surgeon, not because he had not cut off the limb, which he should have done according to the best rules of surgery, but because the limb was half an inch too short, and there was an ulcer still remaining. Damages claimed, \$5000. The case after hanging several terms was finally dropped, and the surgeon, disgusted, retired from the profession.

Taking the law as it is, and the courts and juries as they are, what is the course the practitioner should pursue in justice to himself and to the public? I ask in justice to the public, because it is the highest interest of the public, that the votaries of any art or science should be shielded from exposure to ruinous or unjust prosecutions—ruinous in expenses to the defendant if the prosecution is unsuccessful, and utterly ruinous in reputation as well as money, if successful.

I am happy to be able to read an extract from a letter recently received from Dr. R. D. Mussey, for fifty years a professor of surgery, recently of Cincinnati, and now of Boston:

"Several years before I gave up teaching medical classes, I urgently desired them, when called in cases of fracture, either to decline taking charge of the case, or to state to the patient and friends before a number of competent witnesses, that they could not promise a satisfactory result; but if their services were desired, they would do the best they could: or, if during the treatment, the directions were so far neglected as to expose the case to a bad result, to go to the patient attended with *reliable witnesses*, and dismiss themselves from the case; of course assigning the reasons. I am now out of all this matter, but if I were not, I would invariably pursue this course."

Prudence, doubtless, equally demands that in all cases in which subsequent legal proceedings may be supposed possible, especially before the resort to important surgical operations, and before a resort to measures which are new or not well settled in the profession, and before a resort to the extreme measures of turning or delivery by instruments in obstetrics; the practitioner should guard him as carefully as Prof. Mussey advises in cases of fractures. It is of course unnecessary to do this with formality or ostentation.

If the necessary witnesses are accidentally present, it may be better to use them than to call others; and if not present, they should be sent for as assistants, or for the moral support of their presence, rather than ostensibly as witnesses. The remarks which the practitioner may think it necessary to make, in order to guard himself against future legal proceedings, ought often, if not generally, to be made out of the hearing of the patient, except in cases of injuries. But to call the father or husband aside and talk privately to him will not answer the legal purpose. Some disinterested friend must hear the consultation.

In case there is a consultation of physicians, and the result is stated to the patient or legal practitioners, and the measures recommended are assented to, this assent, thus capable of being proved, puts the case beyond successful prosecution.

A case may be supposed to be of doubtful diagnosis, and still more doubtful prognosis, and a surgical operation may be

deemed necessary to save the patient from death which may be considered otherwise certain.

If all the doubts and difficulties are explained before competent witnesses, and the patient or his proper guardian takes the judgment and skill of the practitioner, as is confessed to be imperfect, for the best benefit he can get from them, and not as perfect and unerring, the doctor is safe from successful prosecution, however erroneous his judgment or practice may be proved to have been. It may in some cases be wise and prudent to require a pledge before hand, that there shall not be even *social or professional blame*, if the case should turn out unfortunately.

If the mouths of the patients and friends are thus sealed in advance, many slanders will be obviated, and many vexatious prosecutions will be avoided; and when they are not avoided, the practitioner can enter upon the defence with confidence, knowing that he can prove his points.

We have to take human nature, the law, the courts, and the juries as they are, and shield ourselves from their abuses the best way we can.

But we are in an age of change and progress, and it is not too much to hope for a change in our jurisprudence. The change which we need is pointed out in the following extract of a letter written by Dr. Alfred S. Tayler, (author of a work on Medical Jurisprudence,) to Sir James Clarke, at the instance of Dr. A. McFarland, now of the Illinois Hospital for Insane, dated London, April 18th, 1854.

"There are three classes of cases which come before our tribunals, Surgical, Medical and Obstetrical, but the first and last are by far the most common, as evidence with regard to proper or improper treatment is in them reducible to greater certainty.

Medical men are often most unfairly dealt with on these occasions, and the unfairness proceeds from three sources. 1st, the Judges, 2d, the Juries, and 3d, members of their own profession appearing as witnesses against them.

1st. The Judges in many cases take a severe view of the matter in action; and so far as I know they invariably rule in favor of the quack, and adversely to the educated practitioner. The ignorance and want of education in a quack, are actually

assigned as reasons for treating him leniently! A regular practitioner charged with *mala praxis*, if a verdict be returned against him, is heavily paid or punished, because, as the judge tells him, his professional education should have taught him! A mistake on his part was the more culpable, because he had had the opportunity of acquiring knowledge, which was denied to the quack. So far as I know, the law is uniformly laid down in this manner by the judges.

If a quack and a surgeon be tried for the same kind of *mala praxis*, involving the same civil injury, or the same criminal responsibility, the judges, in passing sentence, would advise the quack not to take up the practice of an art which he did not understand, at the same time, as he had good motives, and knew no better, his offence would be leniently dealt with.

The unlucky Surgeon would be told that his ignorance was of the most culpable kind, that in proportion to the opportunities he had of acquiring information by a regular surgical education, the greater was the disgrace and infamy of his conduct, and a severe punishment or heavy damage would be inflicted upon him.

The judges and the law are then decidedly against the regular practitioner.

2d. The *Juries*. Whether the jury be common or special, as it is ordinarily constituted, its members are not competent to pronounce upon the propriety or impropriety of certain methods of treatment. They cannot possibly enter into the professional reasons, which induce medical men to adopt a line of treatment that may be objected to as *mala praxis*, and yet, under our system of jurisprudence, they are left to grope their way to a verdict, in the dark. The damages which they assign are generally heavy and disproportionate.

* * * The provoking part of the case is that there are other and inferior professions in which a totally different system is pursued. In any collision at sea or on the river between two vessels, the captain of one being charged with unskillfulness in navigating his craft, and damages being sought against him—a common or special jury at *nisi prius*, is not allowed to decide such a case. They are not permitted to determine whether the helm should have been port or starboard, or whether the fore sail or the jib was wrongly set, and thus led to a collision.

On the contrary, Masters of the Trinity House are called to the assistance of the admiralty judge. They sit as assessors and inform the judge of what the proper course of navigation would require in such cases.

3d. *Medical Witnesses*. They are often bitter enemies to

members of their own profession, and lawyers delight in playing the doctors off against each other. Each solicitor can select his own witnesses, a bad case is often hawked about the profession for some days, but it will pretty surely find one or more supporters in the end, owing to strong *exparte* statements being laid before the medical men consulted.

My opinion is that we shall have no reform of this bad system, until a Board of Medical Assessors, (consisting of men of high repute in their respective departments,) is appointed.

This would abolish the three classes of evils which create so much ground of complaint."

The defects in our jurisprudence, with regard to jury trials, may be to some extent remedied in several obvious ways.

I will suggest but two of them :

1. In any case the correct verdict upon which involves a greater familiarity with the art or science in question than is common to men of ordinary general education to require as a qualification of a member of the jury, that he have had a special training or education in the particular art or science. This would diminish the necessity for testimony by experts, which it is often difficult to procure in person, while it is necessarily imperfect when obtained by deposition. With such a jury the case would be far less likely to turn upon the mere shrewdness or power of ridicule of the lawyer.

2. Another method would be, to so constitute our higher courts, or a branch of them, that the parties may appeal from the lower courts, in order that questions of right or wrong practice in any particular art or science may be passed upon by a jury or board of experts, free from the prejudices incident to the immediate neighborhood of the transaction.

This latter investigation may be based upon the recorded testimony with regard to facts taken in the lower court, and need not necessarily involve ruinous expense.

The defects and abuses of our jurisprudence bear no harder upon medical men than upon all others whose occupations lead them to practice arts unfamiliar to ordinary men.

But from the peculiar relations of the medical art to life and health, while its principles are so entirely hidden to those uneducated in it, the temptations to prosecutions against practitioners of the healing art are very great.

Next to these are the captains, pilots, and engineers upon our lakes and rivers, and the conductors, engineers, switchmen, &c., upon our railroads.

The rules and principles concerned in these arts are comparatively few and simple, and yet common juries often fail to get a clear understanding of them from the best explanations which experts can give them from the witness stand.

If it is difficult for the members of a jury to acquire a knowledge of these during the few hours a trial may be in progress, how impossible it must be for them to become acquainted with chemistry, anatomy, pathology, therapeutics, surgery, and Obstetrics! And yet, without clear ideas of some or all of these subjects, their reasoning and their verdict are alike all in the dark.

It is notorious that the result turns more upon the ability and skill with which a case is managed, than upon the inherent justice of the case.

It is the interest of all classes to have this bungling and uncertain system abolished, or materially amended.

While the medical man would be saved from much needless injustice, the public would also be saved from much groundless or selfish expectation of unearned and undeserved awards of "damages," where no damage has been received, and from much misdirected labor and anxiety.

Were our jurisprudence so ordered that justice would be the rule, and a wrong verdict the exception, none but aggravated cases of ignorance or carelessness would usually be prosecuted, and the sufferer thinking himself aggrieved, would first take counsel of an adviser versed in the science or art in question, rather than of a sharp-nosed advocate, who would be ready to undertake the case for a share of the profits.

SUCCESSFUL CASE OF OVARIATOMY.

By Wm. H. BYFORD, A. M., M. D.Prof. of Obstetrics, &c., in Medical Department of Lind University.

Miss E., aged 15 years, from Roseville, Ill., was brought to me by her parents, May 15th, 1860, to consult me about an abdominal enlargement of which she was the subject. Upon examination, I found a multilocular ovarian tumor of very large size. It occupied the whole abdominal and pelvic cavities, and produced an enlargement much greater than pregnancy at full term.

The history of the case was very obscure, and all that could be obtained was furnished me by Dr. John A. Young, of Monmouth, who was her physician. Dr. Y. says: "Her mother informs me that she was always peculiarly shaped, being short waisted, and as she expressed it, her sides very full and hard; abdomen full. She menstruated at 13, I believe, and continued regular until sometime in the winter, when she missed two or three periods in succession. About that time they noticed sensible increase in size, when they called upon me for advice. She would not submit to any examination, save a very imperfect one of the abdomen externally. There was evident fluctuation, and I noticed in the right iliac region some apparently solid body, about the size of a large orange. I was unable to elicit from her, or from her mother, any reliable history of her enlargement; or whether they had ever noticed any tumors of any size, at any point before. I put her upon the use of Hyd. Potas., with Spts. Nit. and Buchu. Since then, her father informs me, that the catamenia have returned."

After satisfying myself as to the nature of the tumor, I informed them that there were two modes of operative procedure usually resorted to in such cases, viz: Tapping, and iodine injections, and extirpation. That the former probably afforded her not five per cent. of the chances of recovery, on account of its frequent failure to obliterate the sacs, and that this was a particularly unfavorable case, as there were at least seven cysts, all of which would require the puncture and injection.

That the latter operation never failed to eradicate the disease, but was most hazardous, from peritoneal inflammation and other consequences, which in the nature of it must be risked; if such effects were not fatal, the cure would be perfect. That I believed with the operation of extirpation the chances would be seventy-five per cent. in her favor. I felt justified in making this statement from the great perfection to which this operation has been recently brought by the labors of English Surgeons, (and especially Mr. Spencer Wells,) the excellent health of the patient, and the strong conviction that there were no peritoneal adhesions.

After consultation among themselves they chose ovariectomy, and begged me to appoint a time when I would attend to it. As her menses were close at hand, it was deemed best to postpone the operation until the 30th of May.

At this last date I proceeded to operate, assisted by Drs. Young, Hamilton, and McDill, of Monmouth, and Taliaferro, of Roseville; in the following manner:

After having the room brought up to 98 degrees Fahrenheit, the patient was fully etherized and placed upon her back on the operating table; an incision through the abdominal walls, about midway between the umbilicus and symphysis pubis in the linea alba, three and a half or four inches long, exposed the tumor. This being done, I plunged a large trocar into it, and emptied one of the cists of probably two pounds of thick albuminous transparent fluid. Soon as it ceased to run I withdrew the trocar, and introduced it into another sac, and so on one after another until eight cists were evacuated, one of which contained eighteen pint cup-fulls of liquid. The abdomen was now very much collapsed, and the tumor so reduced in size that it was easily withdrawn through the incision. As it lay upon the table, the peduncle, which was about two inches broad, passed through the wound. Two strong silk ligatures were passed, one through each edge of the peduncle, near the tumor, in order to give us command of the stump after amputation. The ecrasseur was passed around the peduncle, between the ligatures and the ovary, and with it the mass was separated from its attachment. The stump was drawn between

the lips of the incision, near its lower angle, and held in position by the two ligatures. Then silver pins, with steel points, were passed through the lips of the wound, passing near to, but not quite touching the peritoneum, and secured with thread as in hare lip. A few fine silver wire sutures closed up the wound superficially. Two of the silver pins used in transfixing the lips of the wound also passed through the stump of the detached tumor, and held its amputated margin a little above the level of the skin of the abdomen. A compress wet with cold water was placed upon the wound, all surrounded with a flannel binder, and the patient placed carefully back in bed. In about an hour she awoke from her sleep perfectly conscious, but entirely ignorant of what had occurred with respect to the operation, and expressed herself as perfectly comfortable.

The cists and contents weighed thirty-nine pounds, and as it was an ordinary many cisted mass it would be unnecessary to give a particular description of it.

As the case was some two hundred miles distant from Chicago, I will introduce the notes of Dr. Taliaferro, as they were communicated to me in letters from Dr. Young.

These two gentlemen had the case under their care after the operation, and much is due to their assiduous and skillful attention for the successful issue to which it was conducted.

The following are Dr. Young's letters :

Monmouth, May 31st, 1860.

Dr. BYFORD,

Dear Sir :

I visited Mr. Eldridge's this morning at 9 o'clock; the patient reported favorably. I will first transcribe Dr. Taliaferro's memorandum.

May, 30th, 2 o'clock, p. m.— $\frac{1}{2}$ gr. Morphia: at 3, dozing; pulse 112. 4 p. m.— $\frac{1}{2}$ gr. Morphia. 5.30—Slept comfortably last half-hour; pulse 100. 7.30—Comfortable, not slept any since 6. Evacuated bladder naturally; pulse 108.

31st, 6 a. m.—Since last note, 1 gr. Opium every two hours. Expressed herself as feeling comfortable; some dryness of the mouth, but little thirst. Passed urine this morning naturally.

I arrived about 9 a. m.—found her resting comfortably; she says she has no pain or soreness of any part; has slept pleasantly and feels refreshed. Skin moist; pulse 104, soft and good volume. I interrogated her with regard to the feeling of the wound, as I had concluded not to disturb the the dressing unless there was some sufficient cause. She said all felt well; there was no pain, heat, or soreness, and no fulness or tight sensation. I therefore concluded there was nothing more to be done at present. About 12 o'clock, when I was making preparation to leave, Mrs. Eldridge asked me if it would be safe to remove the wet things from about her; upon enquiry as to what *wet things* she alluded, my suspicions became aroused, and I immediately examined the binder and compresses, when I found them thoroughly wet with blood, and a large clot lying immediately under and around them. Being surprised at the apparent amount of loss, I examined the pulse again, for fear that I might have been mistaken, but found it as before, 104, regular and good volume. I sponged off the wound, and found that the hemorrhage had proceeded from the pedicle. Kept it exposed some time and watched it closely, there was no return of it. I covered that portion of it from which the bleeding had occurred with Pulv. Sulph. Alam, and small dossils of lint. We then moved her sufficiently to change all the wet things from about her. Examined again, no return of bleeding. Applied *compress*—lighter than before—with binder, and directed Dr. T. to watch closely for a return, and should it recur, to try and secure by ligature if possible. When I left, about 1.30, she said she felt very well. I hope there will be no return of it, yet I fear it. I very much wish we had applied the double ligature in connection with the ecraseur. The hemorrhage was all external as far as I could determine.

Monmouth, June 1st, 1860.

Dear Dr. :

I am happy to inform you in advance that my report of to-day is more favorable and encouraging than that of yesterday. I commence, as before, with the notes of Dr. T.

May 31st, 3, p. m.—Quite comfortable, but little thirst, no pain, pulse 104; has had pleasant and refreshing sleep. 9, p. m.—Same; voided urine about 6 o'clock, naturally and without any trouble; Opium, 1 gr., every two and a half hours. 12, m.—Condition same; no appearance of hemorrhage.

I forgot to mention yesterday that in dressing the wound I placed dossils of lint in the inguinal region, just under the edge of the binder, to give warning if it should be renewed. These could be examined at any time without disturbing the patient.

June 1st, 7 a. m.—No change; pulse 101. Skin moist; slight perspiration when sleeping. Has taken 2 or 3 table-spoonfuls of crackers in coffee. Says she has passed a good night.

I arrived at 10 a. m. Patient looked bright and cheerful; said she felt well, better than yesterday; that her sleep had been refreshing. No particular desire for food, like hunger, but that every thing tasted well, and she could eat. Pulse 106, rather harder than yesterday; skin moist; no pain, soreness, or disagreeable sensation of any kind; mouth feels a little dry, but no actual thirst, a little ice or mouthful of cold water satisfies. Examined, superficially, the dressing, and found it all as I had left it on yesterday.

2.15, p.m.—Rested quietly; pulse 112; skin moist. Cheerful; says she thinks she is going to get well. Removed binder, and compressed carefully; found all as I had left it yesterday; no return hemorrhage; bowels a little more full, not amounting, however, to swelling; no tenderness at least on slight pressure. To continue treatment.

The hemorrhage of night before last and yesterday must have been slow, as the apparent amount lost, if withdrawn at once, or in a very short time, would assuredly have produced alarming symptoms. When I first discovered it I know it *alarmed* me. I hope, however, that there will now be no return of it.

Finding her in such favorable condition, and having fallen behind in my business, I have concluded not to return until Sunday morning. This, at any rate, is the last that you could hear from me until Monday evening next.

I directed her to have a spoonful of beef-tea occasionally, and a little soaked cracker. I deemed this the more necessary in consideration of the hemorrhage.

Monmouth, June 3d, 1860.

Dear Dr.:

It now gives me unfeigned pleasure to report the favorable progress of our interesting patient, as I found all right to day, I may say as well as could possibly be. But to the notes of Dr. T.:

June 1st, 9 o'clock, p. m.—Patient expresses herself as feeling comfortable; a little more heat of surface this p. m. than usual; hands and feet particularly. Sponged with moderately cool water about mid-afternoon; at present, temperature natural; skin moist, pulse 112; no pain or tenderness of bowels, though somewhat more flatulant. Voided urine three times to day, last at 6 o'clock, p. m.

2d, 1.30 a.m.—Resting comfortably; skin moist, amounts to sweating when asleep; pulse 110. 6, a.m.—Rested well; pulse 110; perspiring; bowels not so tympanitic as yesterday; voided urine about 5 o'clock. Has been taking Carb. Soda, about two or three grains every hour or two, with favorable effect on flatulence. 5, p.m.—Pulse 106. No heat of skin; rather unpleasant from sweating while asleep; voided urine about 3, p.m. Has taken a little tea and cracker occasionally since yesterday, says it tastes well; but little thirst. Tightened the bandage as it had become quite loose. 9.30, p.m.—Pulse 104; otherwise as during the day. Voided urine about 7.

3d. 5, a.m.—Pulse 97; other symptoms as before. Bandage more loose; adjusted again. I arrived at 10 a.m.; found her looking well and quite cheerful; says she feels stronger. Tongue clean—or with only a slight white coat, as we would see from abstinence and sleeping so much. Pulse 107; skin moist, perhaps more than necessary. Has been taking some chicken broth, and likes it much. Her Aunt thinks her appetite is good, but that she will not confess it for fear they might offer her too much, as she is aware that she was restricted in diet.

11, a.m.—Examined the wound, removing all the lint, except that immediately adherent to the point from where hemorrhage had occurred; that was firm and dry, occupying about a thumb's breadth. Balance of wound looked well; closed by first intention, and pretty firm. Not a drop of pus seen; cleansed the parts and dressed lightly. No tenderness upon pressure or handling; only slight fulness, not more than there should be in normal condition. Lower portion of abdomen, from umbilicus down, not even rounded up yet. Her countenance shows some evidence of the loss of blood, and also perhaps the effect of the perspirations, in being considerably blanched; her lips, however, retain a good color.

I deemed it prudent under the circumstances to direct a slight increase of nourishment; a table-spoonful or two of chicken-broth or beef-tea every two or three hours, watching, of course, the effect closely. To continue the opiate still as needed.

I would here state—although it does not appear in the body of the notes—that 1 gr. of opium had been given regularly every two and a half or three hours, and has exerted a happy influence, producing composure and pleasant and refreshing sleep.

2, p. m.—Pulse 96. I account for the difference by her slight excitement when I first arrive.

Monmouth, June 5th, 1860.

Dear Dr.:

I still have the pleasure of reporting favorably; no untoward symptom having as yet arisen. As you will perceive by the enclosed, I have removed the pins, everything looking well. I now recur to the regular notes.

June 3d. 9 p.m.—Pulse 100; other symptoms as previously noted. Sweating continues; Aromat. Sulph. Acid, 3 or 4 drops every six hours. I neglected to state in my last that I had advised Dr. T. to use that remedy in case the sweating continued so profuse.

4th. 5 a. m.—Had a comfortable night; pulse 85; sweating not so profuse; appetite increasing a little. 2 p.m.—Pulse

92; otherwise same as morning. Sweating a little more. Elix. Vit., 5 gtts. 9 p.m.—Pulse 92; Sweating diminished; gentle moisture only when asleep.

June 5th.—I arrived at 11 a.m.; found her looking well and feeling stronger; says she feels well, no soreness or pain whatever. Pulse 88; appetite better; food tastes well, and more desire for it. Abdomen natural in rotundity; some barborygmus; bowels in evident motion, but without producing pain. Has taken no opium since 1 o'clock, p.m. Removed pins; about one or two drops of pus followed the middle one, which was all that was seen; wound looked firm and close; a small amount of lint just over the pedicle, very adherent, which was left. I thought we would use an enema this evening, but she spoke of fatigue after the dressing, as it was somewhat tedious, the lint having become dry; and it was thought better to omit it until to-morrow evening.

1.30 p.m.—Pulse 86; resting quietly, inclined to sleep. Has not passed urine since sometime in the night; feels no uneasiness from it. She has used ice constantly when she wished to moisten her mouth, either in lumps or in water. Directed gradual increase of diet, nothing solid, however, for a day or two yet. She has done so well they have thought it unnecessary for me to continue my visits, but will inform me at once should anything untoward occur; they will also keep me informed, at least each alternate day, of her progress, so that I may be able to continue my report to you.

Monmouth, Friday Evening, June 8th, 1860.

Dear Dr.:

On yesterday evening I received the notes of the two preceding days from Dr. Talliaferro, which I subjoin, and not altogether liking their tenor, I determined on visiting the patient to-day, and seeing for myself. I therefore postponed writing until the present. I have just returned, and found *all well*, and an *almost certainty* of speedy recovery. I continue the history from last date.

June 5th. 9, p.m.—Pulse 87; has not recovered altogether from fatigue of dressing wound: otherwise about the same.

6th. 7, a.m. Pulse 92; rested only tolerable through the night; says she does not feel so well; has taken two injections, one of water, the other salt and water. No motion. No thirst or heat of surface. Appetite about the same. Ordered an enema every two and a half hours. 7, p.m.—Pulse 92; no motion of bowels; has taken four injections; otherwise about the same. Oil, half table-spoonful every two and a half hours to two doses, to be followed by enema. Complains of an unpleasant feeling across wound, no tenderness.

7th. 7, a.m.—This morning, pulse 87; more cheerful than yesterday. No action of bowels. The unpleasant sensation has left. Appetite pretty good. Appearance of wound about the same; lint still fast over the pedicle: some unpleasant odor; applied charcoal. Will repeat the oil and enema. Takes no opium. Upon receipt of this, I sent by the same messenger a note advising no particular hurry in moving the bowels, and that I would visit her. By referring to my last note, you will observe that there had been no evacuation of urine for some 10 or 12 hours previous, and as there was nothing said respecting it in this last report of Dr. T., taken in connection with the "unpleasant feeling" and no rest, made me somewhat uneasy concerning her.

I saw her about 10, a.m.—Locked cheerful, entered into conversation, laughed and said she was coming up to town on commencement day, which is in about three weeks, to see her classmates graduate. Her bowels had been moved sufficiently this morning. Appetite not craving, but sufficient. No pain or soreness of bowels or abdomen, and no pain or uneasiness when they were moved. Wound looked firm; the lint covering the pedicle removed. Small suppurating surface about $\frac{1}{4}$ inch diameter; only pus enough to wet the lint. Removed one of the metallic sutures—the one in connection with the pedicle—the others to be removed in a day or two; pulse 90. Says she slept well last night and feels refreshed and stronger. Voids urine naturally and in sufficient quantity: The depressed condition following the dressing of the wound on the 5th, I now attribute in great measure to the fact that the opium had been discontinued from midnight of the 4th,

and as there was a considerable amount of debility from the hemorrhage and strict diet, she was in need of a stimulant. Her natural powers, however, triumphed without artificial means.

Directed a gradual increase of diet; has taken some rice to-day, which her mother tells me has been the nearest approach to solid food yet.

It does appear to me now that she may be considered out of danger. The wound may be considered healed, as there is but a small point uncovered, and that looking healthy; general appearance and condition of the bowels natural, they having been safely moved. She feels well, and save some unnatural paleness, looks well. Her father thinks the only danger now is in being too confident, and becoming careless in feeding and nursing. This is a good idea, and you see emanates from the proper point, so that we may have less fear of improprieties.

What will be the future effect of the retention of the pedicle in the external wound?

This question has been asked me by Dr. Hamilton, and also by her father, in reference particularly to future pregnancy. Having great faith in the *distensibility* and *elasticity* of *female tissue* in particular, I have answered that it would not prove any obstacle. What say you?

Monmouth, June 13th, 1860.

Dear Dr.:

Yours of the 11th is at hand, and as I promised to write you again early this week, I now comply.

I did not hear anything from our patient since my last note until yesterday, when her father came to town. His report was merely a general statement of her condition, which was entirely satisfactory.

He said she was steadily improving; gaining strength as fast as could be expected. Her appetite was good; slept well, and thought she would sit up (in bed at least) the latter part of this week. There was still some very slight discharge from the small surface of the peduncle not yet cicatrized, and from a small spot at the inferior angle of the wound.

Thus far not one unfavorable symptom has arisen, and she says so far as sensation is concerned, she is scarcely aware she has received a wound.

Monmouth, July 13th, 1860.

Dear Sir :

Our patient, Miss Eldridge, made her promise good of attending College commencement, which took place on the 5th. She spent the 4th in town, but did not go out to the exercises, reserving herself for the next day. She says she is as well as ever she was; feels fine and lively.

I endeavored to ascertain something of the early history of the case, but failed entirely, as she was scarcely aware of the time she first noticed it. As near as I could learn from her, some eighteen months or two years ago, she thought her abdomen a little large; never noticed any distinct tumor at any time; always felt well, and was not concerned about herself. She only began to think of her condition about two months before you saw her, and then only because she was conscious of more rapid enlargement, which increased up to the time of operating. She says she feels no difference now, but is aware that she is much lessened in size, judging from her clothes. Still she avers that she never felt any particular inconvenience from the tumor, no heaviness, impeded respiration, or anything of that kind.

The distance from Roseville to Monmouth, where Miss E. spent her 4th of July, is 12 miles.

I wish to make a very few remarks as to the mode of performing the operation.

It will be seen that there was no necessity of introducing the hand, or even the fingers, inside the peritoneal cavity. The whole mass was drawn through the wound by pulling upon the collapsed cists, and there being no effusion of blood, or in fact anything else within the abdomen, the membrane was subjected to no rude handling, or other irritation, except what may have been produced by the entrance of air; and this was quite free, unavoidably. By drawing the stump through the

wound, and placing the margin outside the abdominal cavity, the hemorrhage which often occurs, and did in this case from it, was external. The silver pins and wire produced as little irritation as anything else could. Although Dr. Young in one of his notes expressed regret that we had not ligated the stump, I would certainly not do so were I to operate again. The securing the stump in the wound made it impossible for the small sloughs which are always thrown off from it to irritate the peritoneum. It also, had we tied or clamped it, enabled us to avoid the inclusion of the ligature within the cavity. The ecrasseur is better for separating the tumor than a ligature, because, if the latter is used, the peritoneum must be strangulated and inflamed necessarily, and as inflammation spreads along this membrane with great facility, it may invade the abdominal cavity, and thus light up a fatal peritonitis. The hemorrhage that did occur, had it been suspected, could doubtless have been easily checked, and a little vigilance, I think, would render this operative procedure as safe as such an operation in the nature of things can be.

ON THE USE OF OX GALL IN DISEASE.

BY B. WOODWARD M. D., Galesburg, Ill.

The physiological action of the bile has been thoroughly studied; to some extent its action is understood. Its therapeutical action has also been partially investigated; yet to very many of the profession it is still almost unknown as a remedial agent. The chemical analogy existing between some of its constituents and some of the vegetable alkaloids, particularly quinia, has been pointed out by Liebig and others, and its use in some forms of dyspepsia has been recommended. Having to some extent made use of it—I beg leave to occupy your columns with a few lines on the subject.

We not unfrequently find forms of both remittent and intermittent fevers, in which the bowels are constipated, the

face clay colored, the appetite either entirely wanting, or depraved; the spleen enlarged, the urine scanty, turbid or ammoniacal; the excrementitious matters which should have been eliminated by the kidneys retained, and a state of *uremic poisoning*, and what, for want of a better term, I would call *Hydro-carbonic poisoning*; evidenced by a sallow anæmic countenance, pain in the regions of the liver and kidneys, and such a depuration of the blood that its red corpuscles are notably diminished. All the symptoms point to an arrest of the hepatic functions, and in which mercurials are indicated to rouse the liver from its torpor, and stimulate the intestinal circulation.

But we need also some agent which shall give tone to digestion and assimilation, when once the hepatic functions have been arrested, or seriously deranged, it requires time as well as remedials to restore them, and in the meantime the system requires some agent to take the place of the natural secretions of the liver to carry on digestion, assimilation and depuration. Inspissated ox gall will be found to answer the demands of the system. Not only is the bile excrementitious, but a large, probably the largest part, is re-absorbed, after having undergone a chemical change in the intestines, and carried into the circulation to aid in assimilation and depuration. Recent physiological investigations have evidenced that the liver is a sugar elaborating organ. This sugar being in the form of glycocine or gelatine sugar, cannot be supplied to the system in any other way; and the want of it in torpid states of the liver may be one cause of the long train of morbid symptoms growing out of this condition. This sugar exists in the bile of all animals, and may be supplied to the system by the use of the gall of the ox, till such times as the liver has regained its healthy action. By the use of inspissated ox gall, we obtain all the constituents of bile, except the mucus, which from its nature must be wholly excrementitious.

These are some of the reasons which have led me to the use of ox gall in the treatment of disease. I would not claim that it will arrest a paroxysm of intermittent, but its use in conjunction with quinia has been eminently beneficial in restoring

digestion and assimilation, and also in restoring the depurative action of the kidneys. Combined with iron by hydrogen in the form of pill, it will be found a valuable restorative after intermittents and remittents, keeping the bowels soluble, and stimulating digestion, while the iron will have its own restorative action. In jaundice, from want of biliary secretion, it will also be found a valuable agent, as well as in those forms of dyspepsia depending on hepatic derangement. From 3 to 8 grains, twice a day, is as much as will generally be found necessary. I will only add, that as a laxative in chronic constipation of the bowels, its use combined with bi-carb. soda has in my hands been of marked benefit.

Among your correspondents there are doubtless those who have examined this subject with care; and if they would give us the results of their observations, they would benefit us by throwing more light upon it.

STRANGUARY AS A SIGN OF PREGNANCY.

By E. McC——, M. D., of Dubuque, Iowa.

Any facts which can make more certain medical diagnosis, may be considered worthy the notice and attention of medical men.

It is with this view that I have made the following notes of two cases which came under my observation.

April 28th, 1857, I was called to see a young woman who had been married upon the 6th of the same month. She was about seventeen years of age. I had been called on account of most severe stranguary with which she had been troubled for several days.

But as she had from infancy been troubled with a difficulty of retaining urine a proper length of time, she thought it only a little different phase of the same old trouble, until it became so severe that there was constant pain and desire to urinate

without the ability of discharging more than a few drops at a time, and that with great pain and distress.

I prescribed decoctions of Uva-Ursi and of Buchu without relief, and finally put her upon camphor, which gave more relief than anything which was tried, though warm fomentations were repeatedly applied over the region of the bladder. The difficulty continued to recur from time to time for some two weeks, when it finally disappeared.

I could not readily see any cause for the difficulty, as the patient seemed to be an unusually healthy woman, and by the inspection of the urine I could detect no evidences of urinary deposits of any kind.

The thought of pregnancy being the cause suggested itself to my mind; I examined several authors in reference to that point, and found no one mentioning stranguary or dysuria as an early sign of conception; and besides, upon inquiry, I learned that she had enjoyed the connubial bed but two nights. But the after history of the case proved pregnancy to have been the cause.

She was married April 6th, had had her menses about one week previous to marriage, and did not menstruate afterwards, and was delivered of a strong female child on the 26th of the following December, being thirty-seven weeks and five days from the marriage.

Again, August 4th, 1858, I was called to see a young married lady, who complained of a constant desire to urinate, but could only get rid of a few drops, as she expressed it, and that with very great pain, more or less tenderness, etc., accompanying the discharge.

She had been married some two or three months, had been *regular*, and had menstruated only ten days before I saw her.

As I could find no good cause for this sudden attack, in an otherwise healthy young woman, and one who had never had any difficulty in the urinary or generative organs; and remembering the case above related, I ventured to express to the husband my opinion that *possibly* it might be that conception had taken place, and that it was the cause of the present difficulty.

The diagnosis thus expressed proved correct, and she was delivered of a healthy female infant, May 1st, A. D., 1859, being just forty weeks from the menstruation which occurred ten days previous to my first attendance.

I have, since these two cases, continued to look at the authors to which I have had access, and have found stranguary or dysuria mentioned but by one as an evidence of pregnancy in its early stage, and that is by Dr. Blundell, as given in his testimony in the Gardiner Peerage Case, (Beck's Med. Jurisprudence, vol. 1, p. 593,) where he says :

"I saw a case a few days after impregnation; there were symptoms of irritation about the bladder and adjacent parts, and the catamenia were absent." He had no doubt but these symptoms arose from impregnation.

It will be noticed in the report of my cases that there had not been sufficient time from the last menstruation for the recurrence of the menstrual function, and yet the history of both cases proved that the diagnosis of conception would have been safe and correct.

The question arises, was this a merely accidental coincidence, which might lead astray in the next case? Or, is stranguary really a phenomenon, which may be taken under certain circumstances as a sign of impregnation before the first month is passed?

Any facts from the profession on this subject would be interesting to your correspondent.

BOOK AND PAMPHLET NOTICES.

MEDICAL USES OF ELECTRICITY. By ALFRED GARRATT, M. D.

In a former number of the *Examiner* we barely had time to announce the issue of this work from the press of the enterprising publishers, Ticknor & Fields, Boston.

From a careful examination of its contents we are confident

that the medical profession will be under lasting obligation to Dr. Garratt, for a collation of facts not before in accessible form for profitable investigation, for the happy arrangement of his subjects, and the successful manner of their treatment.

The author very justly remarks that "a systematic work on the medical and surgical uses of electricity, containing clear and practical directions as to *where, when, and how* to employ electricity as a remedy, has long been greatly needed." Many eminent men had requested him to publish the results of his labors in this department of medical science, and the result fully justifies their request, and compliments their judgment.

The work is both scientific and practical, a book which should be in the hands of every medical student, and no medical library will be complete hereafter without it.

The author says: "I was fully aware that my position, my views, and my aims might excite misapprehension, because the hitherto very general association of the empirical uses of electricity with quackery, throughout the length and breadth of our country, would naturally lead to some erroneous verdict, at least until my true position might be directly and definitely defined. On the one hand, in regular practice, no surgeon, no oculist, no spinal, or uterine, or urinary doctor; no orthopedist, or general practitioner, shall imagine that I wish to interfere with their respective positions, for which they have especially studied, and in which they are devoting their lives. On the other hand, let no wandering arab of a boasting and quackish 'electro-pathist,' electro-physiologist, or traveling 'galvanizer,' attempt to screen himself by using my name and address, under any connivance or sympathy."

"Our art is *one* art. Each branch is but a part of the whole, and simply '*E pluribus unum*.' It is too late to be sticklers for creeds or isms, for pathies or systems; only let each be honest and earnest in his professional sphere. The author is desirous that this should no longer be termed a '*system*' of practice, but merely the *electric remedies*, etc., and that we take especial pains to eradicate these false notions from the minds of the people."

Chapter I, describes *natural* electricity, its character, sources,

and discovery; presents the theories of Franklin, Symner, and De la Reve; treats of clouds, thunder storms, fogs, relation of electricity to the air and earth; the difference between electricity and magnetism; lightning, and safety from lightning: effects upon the human organism, as regards births and deaths, and of electric changes as the cause of epidemic disease.

Chapter II, presents us with the "Early History of the Medical Uses of Electricity."

Chapter III, treats of "Electrical Instruments and Apparatus for medical purposes," with ample references to the discoveries of Prof. Oersted, Ampere, Sir H. Davy, M. Nobili, Profs. Henry, Faraday, Neef, etc.

Chapter IV. Discusses the subject of Electro-physiology, with citations from Matteucci, Alfred Smee, Becquerel, Marshall Hall, Brown Sequard and others. A chapter of exceeding interest, and to which we shall have occasion again to refer.

Chapter V. Describes the methods for the medical employment of Electricity.

Chapter VI. Discusses Hyperæsthesia.

Chapter VII. Anæsthesia.

Chapter VIII. Spastic Diseases. Views of Marshall Hall on Spinal Diseases, with the researches of Wm. Flourens, Weber, Todd, Hall, Brown, etc.

Chapter IX, has reference to Electro-Therapeutics in Midwifery. Effects of Electricity upon the abdominal viscera, and upon the secretions.

Chapter X. Electricity in Surgery. Its agency in the treatment of "Nervous affections of the Eye, the Ear, Indolent Ulcers, Aneurisms, Ununited Fractures of Bones—as a Moxa, a Caustery, etc.; closing with an article on Surgical Dentistry.

If future trial shall verify the experience and anticipations of Dr. Garratt, we shall be greatly indebted to him for bringing forward these additional means for alleviating misery and curing disease. If it shall not in all respects realize our hopes, still the work will be eminently valuable, as stimulating to investigation in the right direction, and will hasten the exploration of a field of study and practice far too long neglected.

The work will repay an attentive perusal, its illustrations are admirable, and its mechanical execution in all respects a credit to the publishers.

J. H. H.

BOZEMAN ON THE APPLICATION OF THE BUTTON SUTURE TO
VARICOSE VEINS.

Pamphlet literature is acquiring an immense extension in the medical and surgical professions, and bids fair ere long to rival in importance the medical journals themselves.

We approve of the plan. The diffusion of knowledge will thereby be favored, and though many of the pamphlets will, like this, not be of great importance, yet many valuable ideas and suggestions will make their way into real usefulness, which otherwise had remained unnoticed in the brain of their inventors.

The pamphlet before us contains an article from the *N. O. Medical Journal*, by Dr. Bozeman, of Alabama, already known to the profession as having improved Sim's operations for vesico-vaginal fistula, by the invention of the button suture.

The application of the same suture is proposed for the obliteration of varicose veins.

The button suture of Dr. Bozeman, consists of fine silver wire, such as was prepared by Dr. Sims, which is inserted through the tissues wherever desired, and the two ends drawn through a small hole in a lead disc or button. The button thus closes up the suture by being pushed down to the skin, and is retained there by a perforated shot which is slipped on after it, and compressed upon the wire so as to hold it in position. The wire is then cut off near the shot and the suture is completed. In vesico-vaginal fistula, Dr. Bozeman makes several perforations in the same button to receive the several wires. In applying the suture to varicose veins of the *limbs*, Dr. B. inserts the wire upon one side of the vein, and brings it out at a separate opening upon the other, thus compressing a piece of skin with the vein.

It would probably be better after encircling the vein to return the wire through the *same opening* of the integument,

and thus compress the vein alone, which would result in less irritation and pain.

In varicocele the author adopts this plan. He details three cases of varicose veins of the leg, and one case of varicocele successfully treated in this way.

The advantage of silver wire over silk ligature of the same strength, is its smaller size and its smoothness, by which it lies in its place with far less irritation than silk.

We think that there is a mistake in selecting silver in preference to gold or platina in such operations as vesico-vaginal fistula. Silver is readily reduced to a sulphuret by contact with the tissues, hence, in such situations it becomes blackened and loses its polish, and is more liable to irritate and cause suppuration than gold. We give the latter, therefore, the preference, both in fistula and in varicose veins. The use of the button, however, is a valuable improvement, and worthy of adoption in a variety of circumstances. Another point worthy of consideration in the button suture, is whether the button ought not to be of the same metal as the wire. The use of silver, gold, or platina, in contact with lead, establishes at once a minute galvanic battery, whose current acting on the tissue at the point of insertion, may in some cases serve to impede the process of adhesion.

E. A.

MEDICAL COMMUNICATIONS OF THE MASSACHUSETTS MEDICAL SOCIETY. With an Appendix, containing the Proceedings of the Councillors, and of the Society. Vol. ix.—No. vi.—1860.

To the courtesy of the President, Dr. John Homans, of Boston, we are indebted for a copy of the above. The bulk of the present number, which is gotten up with its usual degree of typographical elegance, is occupied by the Annual Address—*Currents and Counter-Currents in Medical Science*—of Dr. O. W. Holmes. The remainder of its contents embrace the List of Deceased Fellows, Obituaries, Proceedings of the Committees, Board of Trial, Proceedings of the Society, Treasurer's Report, Officers of the Society, Officers of the District Medical Societies, List of Fellows admitted since 1854, Index,

etc.,—valuable, all, for reference, but not, in the main, of general interest, except to the local reader. As exceptions, however, we note the appointment of a committee to inquire into the expediency of the Society's co-operating with the Medical Profession of Great Britain, which is about to erect a monument in Westminster Abbey, to the memory of John Hunter; also the appointment of a committee to urge upon the Legislature the establishment of a Scientific Commission, to investigate the Cattle Disease.

With its characteristic good sense, the Society, at its May meeting, re-elected its former excellent President, Dr. John Homans; its indefatigable Secretary, Dr. John B. Alley, and other of its former officers.

F. R.

COXALGIA OR HIP-DISEASE.

In recording the proceedings of the American Medical Association in the July No. of the *Examiner*, we alluded to the paper of Dr. Sayre of New York, on Coxalgia, read and discussed in the Surgical Section of the Association. We then stated briefly the positions assumed in the paper or report, but could not give a summary of the discussion, being engaged in another section at the time it took place. We are now happily enabled to supply the omission by copying the following report from the *American Medical Times*, of New York, for July 14th, and 21st.

"Dr. LEWIS A. SAYRE of New York, as chairman of the committee appointed at the last meeting of the Association to report on *Morbus Coxarius*, and the *Surgical pathology of Articular Inflammation generally*, stated that he had prepared a paper referring only to the first branch of the subject, preferring to leave the rest for a future time.

"The present report embraces the pathology, causes, and symptoms of the disease, together with the history of many cases in detail illustrative of the plan, and principle proposed in the treatment of its various stages. Also, a complete collection, in tabulated form, of every case of exsection that had

been performed up to the present time—many of which had not been before reported—with a brief history of the same, including the age, sex, cause, condition, time, and mode of treatment; and the result, with the name of the operator, with mention of the record for reference. Also, a full and minute description and engraving of a new instrument, devised by him, for the mechanical treatment of this disease in its earlier stages; an explanation of the principles upon which it was constructed, its mode of application, and result of the treatment illustrated by cases, and photographic drawings taken from life.

"The disease was divided into three stages—first, second, and third. In the first stage, local depletion was advised, together with the removal of all pressure from the synovial surfaces, by means of the instrument referred to. Issues and setons were ignored, and the reasons given therefor. In the second stage, when the effusion was very great and showed no signs of being absorbed by ordinary means, puncture was insisted upon, to be followed by the application of the splint. Cases were cited to show the propriety and harmlessness of this practice if properly performed, not only as a means of relieving the patient, but of arriving at a diagnosis. He maintained that the advantage thus gained by opening the joint was more than counterbalanced by an after risk.

"In the third stage, when the synovial membrane was destroyed, the cartilage of incrustation eroded, and there were positive evidences of bony crepitus present, the operation of *exsection* was strongly urged.

"If such an operation were performed before the acetabulum had become perforated and the system exhausted by hectic fever, there was every prospect of a final recovery; and that within a very few months, with but very slight deformity, and almost perfect motion. Various examples of the benefit of such treatment were given in detail, and the report closed with a tabular review of seventy-two cases of *exsection* of this joint. Of these operations fifty-eight were performed for caries; forty-four recovered with more or less perfect motion, and the remaining fourteen died; seven from exhaustion, the acetabulum being perforated and the system being broke down by

gangrene; two from psoas abscess; three from insufficient removal of the disease; one from fracture; and in one the cause of death not stated. Of the remaining fourteen operations eleven was performed for gun shot wounds, only two recovering; one for fracture; and in the other two the reason for operating was not stated.

"Dr. KRACKOWITZER, of N. Y., asked wherein any splint mentioned differed from the one known as Dr. Davis's, and which of the two had been first in use?

"Dr. SAYRE, in reply, stated that he had seen Dr. Davis's splint before his own was manufactured, and had expressed to that gentleman his disapprobation of the means used for extension, and that he (Dr. S.) had afterwards set to work to construct one that answered, as he thought, the purpose better. He further remarked, that in Dr. Davis's splint there was, in place of the ratchet and cog, a simple hinge arrangement, which was incapable of regulating extension. This he considered a very important point to be looked after, inasmuch as a child would grow fully three or four inches every year, and it was necessary, when the instrument was worn for any considerable length of time, that the means of extension should be so regulated as to meet all the requirements of the case. Dr. S. maintained that in his modification this principle was fully carried out.

"Dr. CROSBY remarked, that the subject of the treatment of hip-joint was a very interesting one to him, more particularly that part of it which referred to the opening of the joint. He thought that the proper time of performing such an operation was a matter well worth discussing.

"Dr. SAYRE, in this connection, stated, that if the joint was fully distended so as to give the peculiar deformity referred to in the second stage of the disease, where the limb was apparently lengthened, flexed, abducted, and everted, and with no signs of the disappearance of the effusion, he would puncture the joint and afterwards apply the splint. The earlier such an operation was performed the better it was for the patient. If, on the other hand, there was good reasons to suppose the existence of sero-purulent matter in the joint, as shown by the

long continuence of the disease, general emaciation of the patient, and hectic, a free incision should be resorted to, taking care that no pouch be left.

“Dr. MUSSEY, of Ohio, asked Dr. Sayre what was the guide for making the puncture.

“Dr. SAYRE stated that the puncture was made just behind and above the trochanter major; the depth at which the instrument entered varied with the amount of fat deposited in the sub-tegumentary tissue. In answer to a question from Dr. Atlee, Dr. S. remarked that if the character of the fluid was found after puncture to be sero-purulent, the puncture would be converted into a free incision; if it was then found that the disease had progressed still farther, that the bone had been left bare, all that remained to be done was exsection of the diseased portion. The after treatment consisted in keeping any resulting inflammation in check.

“Dr. CROSBY stated, that in a case in which he performed puncture, he first made an incision through the skin and areolar tissue behind the trochanter down to the muscle; then separating the fibres of the same with a director, he ascertained, by the motion of the instrument, the extent of the distension. A trocar was introduced, and synovia and pus escaping, the incision was enlarged in the same manner as referred to by Dr. Sayre. The case treated in this way recovered in a surprisingly short space of time, the patient walking about three months after the incision was made. After the operation, all that remained to be done was to approximate the edges of the wound by adhesive straps, the lower portion being kept open by the introduction of a tent.

“Dr. HYDE asked Dr. Sayre's experience in reference to the opening of other joints.

“Dr. SAYRE replied, that he had opened the ankle and elbow joints repeatedly; had followed the same general principle, and had obtained like good results. In reference to the treatment of the early stage of the disease, Dr. Sayre stated that Dr. March, of Albany, had some years before constructed a splint for the purpose of keeping the parts at rest, and preventing any friction or undue pressure of the two inflamed

synovial surfaces upon each other. He believed that Dr. May was the first one who advocated that plan of treatment, and he desired very much to hear that gentleman's experience.

"Dr. ALDEN MARCH, of Albany, next made in substance the following remarks:—It is true, a few years ago, I brought this subject before this association, and Dr. Sayre has given a faithful account of the views I entertained at that time. The principle of treatment applied more especially to the early stages of the disease, and consisted in keeping the parts in a state of quiescence and in removing all undue pressure. As long ago as the days of Dr. Physic of Philadelphia, a splint was employed in the treatment of this disease. His (Dr. P.'s) idea was simply to prevent motion of the parts, without extension or counter-extension. In 1839, Dr. Wm. Harris published, in the *Philadelphia Medical Examiner*, four cases of morbus coxarius, treated by himself, with extension and counter-extension; but made no allusion to the pathological condition of the joint structures involved upon which he founded his treatment. My attention was directed to the investigation of the pathological condition of the most common and destructive form of hip disease as early as the year 1845 or '46. At the session of this Association held in Boston, 1849, at the office of Prof. J. B. S. Jackson, and in his presence, together with some twenty-five or thirty other distinguished surgeons and pathologists, I exhibited several specimens of morbus coxarius, and endeavored to explain the destructive process of this terrible disease. Where two inflamed surfaces rub upon each other, or where undue pressure is made on the tender and inflamed parts, and continued for some time, necrosis and more or less destruction of the joint is pretty sure to follow. The only way to remedy such evil effects was to remove the cause by taking off the pressure. To this end I constructed a rude apparatus, and brought it before the Association at its session in New York, 1853. It consisted simply of a long splint, broader above than below, to which a foot-piece was attached, and a perineal and circular strap or belt. This long outside splint extended from the sole of the foot to a point on the side nearly opposite to the nipple; and at the part opposite to the trochan-

anter major, there was a fenestrum or opening by which all lateral pressure was removed from that projecting point of bone, and consequently from the acetabulum. In regard to the results of this plan of treatment, I find them fully corroborated by the experience of Drs. Sayre and Davis

"But to go further; with regard to the operative part—to the opening of the hip-joint, I must confess I have had very little experience. I have two specimens in my museum of heads of femurs which were necrosed, and were worked out spontaneously. In both instances the patients recovered, and, I believe, are still living, in the enjoyment of good health. I have opened the ankle, knee, and elbow-joints not unfrequently; but I do not remember to have opened the hip-joint more than twice. In one instance, I failed to reach the effusion; but, in process of time, the necrosed bone worked through the opening made; that young man is now alive, and in good health. The mother, at the time of the operation, thought I was too cruel, and in a few days sent for another physician in the neighborhood, who said that I was mistaken in my diagnosis, and that it was nothing but a case of rheumatism.

"He stated, in conclusion, that when his apparatus was first brought forward, he was pretty severely criticised in reference to the supposed ill effects from confinement.

"In Dr. Sayre's apparatus, this confinement, after the acute character of the disease had subsided, was unnecessary, and it was consequently more desirable on that account, as a valuable means of cure. He was glad to see efforts made to improve the treatment of a disease so common, and heretofore so destructive to limb, if not to life; and, if he had been the humble agent in directing the attention of the profession to its mechanical treatment, on true *pathological* and *philosophical* principles, he felt as though he had not in vain devoted many studious hours to this interesting and important subject.

"Dr. HUBBARD, of New Hampshire, stated that he had a case of hip-disease which had been managed upon what he considered the conservative principle, where the abscess was allowed to burst. The patient was afterwards placed upon March's splint for three months and a half. As the result of that

treatment, the inflammation subsided, and the general health of the patient very much improved, so much so, that it was very desirable to get him up and about. Just at that time Dr. Sayre's report came to hand, and it struck Dr. H. that it was just the instrument that was applicable to that case. Accordingly he sent a measure, and was soon supplied with the apparatus. The splint was first applied in the afternoon with a slight amount of extension, which was increased the following morning. On the following morning the patient's clothes were put on him, and he was assisted to walk to the window and sit in a chair, where, at the time of making this report, he still remained. The child is some six or seven years of age, and in testimony of the good effects of the treatment, desired Dr. H. to return his sincere thanks to Dr. Sayre for his instrument. The speaker expressed himself as entirely satisfied with the result of the case, and intended at the very first opportunity again to test the advantage of the instrument.

"Dr. WILLARD PARKER, of N. Y., remarked, in relation to the treatment of the disease in question, that inasmuch as it occurred in scrofulous children, the constitution was the main thing to be looked after; any local appliances being a secondary matter. The constitutional treatment required was sustaining in its character. If any apparatus could be suggested, by means of which the patient might avail himself of exercise, and at the same time keep the tender surfaces apart, a great point would be gained. It seemed to him that Dr. Sayre's apparatus was the result of an old suggestion, and that due credit, as the prime mover in the affair, should be given to Dr. March. He thought that the principle of treatment, as laid down by that gentleman, was a correct one,—the prevention of pressure, and the consequent destruction, not only of the synovial membrane, but the cartilage and bony structure.

In reference to the time for opening joints, he did not think it was a question that had been satisfactorily answered. He had some experience in puncturing knee joints, though he never had occasion to perform such an operation upon the hip. In this connection he thought it necessary only to refer

to a single case of the former class, which might be considered as a type of the whole. It was a young boy ten years of age, whom he saw in consultation with a surgeon of New York City. The child at that time had been suffering intense pain for some days in consequence of pressure produced by an accumulation of fluid in the cavity of the joint, which had been the seat of acute synovitis. The pain was so intense, that administration of opium and chloroform was found to be entirely useless, as far as any good effects were concerned.—The question naturally enough came up—What was to be done? It was finally decided that an opening should be made. This was accordingly done by a thumb lancet, when so great was the tension of the parts, that the fluid was forced to the extent of fully two feet from the aperture. The fluid, upon examination, was found to be of the nature and consistency of gelatine. The system soon after became tranquil, and sleep followed the administration of an ordinary anodyne. In the course of time a complete recovery was the result.—He could not see the difference between joints which were already the seat of suppuration, where the synovial membrane and cartilage were destroyed and abscesses in another part of the body. The indication for the evacuation of the joint were equally strong in both instances.

“Dr. ATLEE, of Pennsylvania, thought it was his duty to give his experience in relation to opening of joints, by citing the following case: The patient was a German servant of his, 18 or 19 years of age, with a highly scrofulous constitution.—He was observed limping about the house apparently in great pain; and on being questioned, he told the doctor that for some days he had suffered from severe pain in his knee-joint. Upon examination the part was found very much distended, and his suffering was so intense, that it was evident that immediate relief should be given, or else suppuration would be the result. A small trocar was introduced, and about eight ounces of highly albuminous fluid was drawn off. The relief was immediate, and instead of having him laid up for three or four months, in three weeks he was perfectly recovered. He stated, in conclusion, that previous to being compelled to perform

the operation, he had always a prejudice against puncturing knee joints, but the result of this case tended to alter his views in relation to that point.

"Dr. McDOWELL, of St. Louis, stated that he would have given all he had ever made in his profession, and all he expected to make, if he had known of this instrument when his son had morbus coxarius. He should have punctured the joint early, then have applied the instrument, and would have been rewarded by saving his boy. In reference to opening into the knee joint, he stated that he had performed the operation in four instances. In one case, ankylosis was the result; and in three others no serious damage took place. In conclusion he expressed a determination to follow out the principles of treatment as set forth in the discussion.

"Dr. F. H. HAMILTON remarked in relation to the treatment of hip disease, that he had early been instructed with reference to the necessity of confinement, but that experience had since taught him the unsoundness of such a principle. He had come to the conclusion that such confinement was in direct antagonism to another and equally important indication, namely, the restoration of the general health. If the child was past six years of age, this was not a very difficult thing to do. His plan was simply to instruct the parents to obtain crutches that were handsomely made of Malacca Wood, and silver mounted, so that the child would not be ashamed of them, nor throw them aside when out among his playmates.—By the adoption of these means simply, the patient would be tempted to take the requisite amount of exercise. To cases under the age referred to, he thought that Sayre's instrument was very well adapted. In reference to operations upon joints he was convinced that there was not so much to be feared in opening them as in making that opening insufficient. He had resorted to the practice not only with impunity, but was satisfied with the result in every case.

"Dr. JAMES R. WOOD, of New York, made in substance the following remarks:—The subject of opening joints has interested me for many years, and the opportunities offered for investigating the subject have been ample. The indiscriminate

opening of joints is a very serious matter, but there are instances, where the experienced surgeon, by resorting to this practice, will do great good to his patients and credit to his calling. So great was the horror in reference to injury of the joints in days gone by, that even amputation and ligature of the femoral artery in puncture of the knee-joint has been resorted to by our best surgeons, and that within the last fifteen or twenty years. It was because of the resulting constitutional irritation, that this extreme practice was resorted to. I may be permitted here to offer a few thoughts on the different variety of cases in which the joint may be opened. The first is in those cases of traumatic trouble of the joint, where it is opened by puncture as with a penknife, or as is not unfrequently the case, where this has been done, by a drawing-knife, in the hands of a cooper. This latter accident I have met with several times. These are the cases that were so much dreaded by the older surgeons. Here you have acute inflammation speedily terminating in acute abscess of the joint, and the sooner you allow the matter to escape by a free opening the better it will be for the patient; for by so doing, you escape the constitutional irritation and its consequences also, the toxæmic effect from the absorption of matter. Again, as in the case related by Dr. Atlee, where you have the joint filling rapidly with serum, the result of a different grade of inflammation of the synovial membrane, producing excessive distension, excruciating pain, and consequent constitutional symptoms, because of the want of the elasticity of the tissues encroached upon, you are to make a small puncture as you would in the case of accumulation of serum, or pus in the cavity of the thorax; close the wound at once and the relief is immediate. But let me be understood, that I would not resort to these practices in the cases instanced, unless the usual antiphlogistic treatment had been resorted to. I am convinced that it is good surgery, after they have failed, to open the joint as I have stated. Again, we have another form, and one which is very common, in our large cities; it is the result of a constitutional trouble occurring in the badly fed patients, living in pent-up apartments, where the light of heaven and fresh air

are seldom admitted; who are sustained by bad food and begotten by strumous or syphilitic parents. In this class of patients we have the disease called *fungus articuli*, by Sir Benj. Brodie, the old-fashioned *white swelling* of our fathers, no matter whether it occur in the hip, shoulder, elbow, knee, or the spine, it is one and the same disease; and although the surgeon may do much, the *medical* treatment should never be forgotten, for without it all surgical appliances will be of but little avail. Give your patient good air, sea air if you can, plenty of light, out-door exercise as much as practicable, iron, wine, or ale, cream, roast and broiled meats, with blood-gravy, and so forth. In these cases, as a general rule, you have the integrity of the joint destroyed before you are consulted; a very different state of things from that existing in the cases already referred to. The synovial membrane, the cartilage of incrustation, and frequently the bone has succumbed to the peculiar grade of inflammation common to this disease. There is but little pain perhaps, but little heat, in fact the swelling about the joint and incapacity of use are the most prominent symptoms presenting themselves; if you exclude the constitutional trouble of the patient which it is not worth while to refer to here. As in the first form referred to, you have an abscess, but a very different one; in the first you have an acute, a hot abscess, but here you have a chronic or a cold abscess. It is in all respects like the psoas abscess which occurs in the groin, or the lumbar in the loins. It is in these cases that I have occasionally opened the joints; but I am sorry to say, that my experience is such as to cause me to do it always with reluctance, and let me say here, Gentlemen, that it is my judgment that the good surgeon will always approach a joint with great deference and hesitancy. For even in this class of cases the majority of the patients whom I have operated upon, and those of my neighbors that have fallen under my observation, have either lost their limbs or their lives. Resection, although appearing much more formidable than the simple puncture of the joint, statistics warrant me in saying, is a very much more safe operation, and the results are very much more favorable.

"Dr. TOWNSEND asked Dr. Sayre whether he would open the abscesses that occur upon the thigh in this disease?

"Dr. SAYRE stated, that by the early use of his apparatus, and by following out the plan of treatment set forth, this complication would not take place. If, however, he should meet with a case where such an abscess existed, he did not see any reason why it should not be treated by a free incision as in any other instances.

"On motion of Dr. Atlee, Dr. Sayre's paper was recommended by the section to the Association for publication in its Transactions. The meeting then adjourned *sine die*."

SELECTIONS.

Pathology and Therapeutics of Typhus Fever.—The number of the Glasgow Medical Journal for January, 1860, contains an interesting paper on this subject by Dr. Jos. Bell, one of the physicians to the Glasgow Infirmary. The following are his concluding propositions:

1. That in numerous cases of typhus, about the fifth, sixth or seventh day of the attack, the impulse and systolic sound of the heart becomes feeble, and ultimately imperceptible.

2. That these symptoms indicate a morbid alteration in the structure of the muscular tissue of the heart, especially in the walls of the left ventricle.

3. That this alteration resembles the usual changes which result from congestion and inflammation of the muscular structure.

4. That the nature of this pathological change requires further examination and research, because the evidences on which the doctrine of its non-inflammatory origin rest, are not conclusive; the circumstances on which Louis and Stokes have placed reliance not being uniformly present.

5. That the beneficial influence of stimulants does not prove the non-inflammatory nature of the morbid change, because in asthenic inflammation a stimulating treatment is always necessary.

6. That whether or not the pathological alteration be owing to inflammation, the softening must be regarded as one of the secondary effects of typhus.

7. That the proper treatment is to maintain the action of the heart by stimulants.

8. That in cases of cerebral and pulmonary disturbance arising in connection with cardiac softening, a stimulating plan of treatment is indicated.

9. That the presence or absence of the physical symptoms diagnostic of softened heart, may be relied on as affording trustworthy evidence by which the asthenic nature of these cerebral and pulmonary affections can be determined.

From these propositions it follows as a *carollary*, that it is the duty of the physician to devote the strictest attention to the action of the heart, especially as regards its impulse and sounds, throughout the course every case of typhus.—*Amer. Jour. Med. Sci.*

On the Importance of the Functions of the Skin, in the Pathology and Treatment of Tubercular Consumption. By A. Toulmin, Esq., (St. Leonard's.)

The author commenced by offering as the proximate cause of tubercle in all cases, the breathing of impure air, and air in so small a quantity as to render it impure, especially during the night. Wherever this was the continuous state of existence, the result must be a deficiency of oxygen in the red corpuscles of the blood, and as the consequence of this, the deposition of plastic fibrine in an incomplete state of oxygenation, and therefore of organization, and thus incapable of being ultimately got rid of by change of matter. It consequently remained as an extraneous adventitious substance in the system offering to the observer all the characteristics of tubercle.

To explain the discrepancy which appears in the rich (who have no want of oxygen in the air they breathe,) being equally subject to phthisis with the poor, he drew attention to the importance of the respiratory functions of the skin, as proved by the almost instant death that occurs on closing the cutaneous pores by artificial means, as by varnishing and gilding the skin of rabbits and other animals; and he observed that, in consequence of the coldness of our climate and other causes, the better classes of society were certainly not in the habit of making the washing the whole surface of the body a part of their daily toilet; and consequently that the exuviae momentarily forming on the surface of the skin—the joint production of the sordes from within, combined with the *débris* of the cuticle—soon became more or less impervious, although the individual might be in the habit of changing his linen daily.

As an illustration of this state of skin, the author referred to acne so frequently seen on the face, as being in reality the general state of the skin of a large proportion of society especially in the earlier periods of life, when phthisis generally

shows itself. The free entrance of air, as well as the exit of carbonic acid through the skin, being thus impeded, the same imperfect oxygenation of the blood, ensued as was produced in the poorer classes, by breathing mephitic air. For the removal of this state of the skin, the only means of cure were to be found in the instituting a full and diaphoresis by the aid of artificial heat; the result of which in first softening and then expelling large quantities of inspissated sebaceous matter, after the surface of the body had been washed clean with soap and water, was not surprising.

The use of hot air bath, as a therapeutic agent was no innovation on the established practice of the profession, as it was the mode of bathing practiced by Hippocrates, Galen and Celsus; and the universality of the practice was shown by the fact that the remains of such baths had been found in every colony of the Roman empire.

If tubercle be imperfectly organized fibrine, then it should be looked upon as a blood disease; and, seeing it is found in other parts besides the lungs, without destroying life, its deposition in them should not be considered as disease either of the lungs or air-tubes, but as an accidental circumstance, killing mechanically, by its ulcerations extending to the surrounding lung tissue. The author called in question the propriety of sending consumptive patients abroad to a warm climate during any stage of the disease; as although in the latter stages of the complaint, when the air tubes sympathized with the tubercular irritation, a warm atmosphere seemed more congenial to the patient's feelings; still in the earlier stages, when a cure was practicable, the breathing the open air of our winter, (at least on the south side of the island,) was most important. He instanced, as proof that the breathing cold air did not cause the complaint, the fact that tubercular consumption is not to be met with in high northern latitudes.

The treatment of phthisis was considered under its hygienic and medical aspects. Under the former, and particularly in the earlier stages, the patient was recommended to live in a high, dry and marine atmosphere, on the Downs, rather than under them; to be as much as possible in the open air; to use all sorts of athletic exercises, (avoiding such as accelerate the pulmonic circulation) suitable to the strength and sex of the patients, by which a more rapid change of matter is effected, together with absorption of already deposited tubercle; as well as the deposition of more healthy—*i. e.*, of more highly organized matter. Medically, the treatment was comprised in a few short aphorisms, which were: 1. The keeping the functions of the skin in healthy action by means of the hot air

bath. 2. The anointing the whole surface of the skin daily with some oleaginous matter. 3. The keeping a local ulceration always patent by means of an issue or seton; and 4. The use of some one or more of a large variety of tonic and antiseptic medicines; all admirable adjuvants in improving the general health, (if selected in conformity with the function most sympathising with and reacting on the disease,) but powerless in arresting the specific lesion in question, without the previous "Open Sesame," of the hot air bath, followed by aspersion of cold or tepid water.—*Brit. Med. Journal.*

New York Medical and Surgical Society.—Discussion on Diphtheria.—Dr. C. M. Allin, of Flushing, related the histories of some cases of diphtheria which had lately come under his notice. About four weeks before he saw the first case, a child about six years of age was seized with an attack of well marked suppurative tonsillitis, which seemed to run its ordinary course for about a week or ten days, during which time an abscess formed and discharged; the swelling of the parts then began to subside. Two or three days subsequent to this, the child was suddenly seized with croupy symptoms. On examining the throat it was found that the swelling of the tonsils had returned, and at the location of the opening of the abscess there was discovered a large patch of false membrane, which covered the uvula, and extended down into the pharynx as far as could be seen. The child was very much prostrated, nearly pulseless, and was evidently rapidly sinking. The usual application of nitrate of silver to the parts, and the administration of stimulants was resorted to, but in vain, for the child died exhausted within twelve hours from the appearance of the first bad symptoms.

Three days after this, a younger child, in the same family, was attacked with sore throat, which presented the ordinary appearance of ulceration. In this case, however, none of the symptoms of prostration were present, neither did any diphtheritic membrane show itself, and the child recovered. Nothing more was seen of the disease for the next fortnight, when Dr. Bloodgood, the partner of Dr. Allin, was called to another case. He found the child very much in the condition of the first case, and learned that she had first complained of sore throat to her mother three or four days before. Various domestic remedies were resorted to, but the patient growing rapidly worse, Dr. B. was called in. On examination, the roof of the mouth, the throat, uvula, and all below the pharynx, as

far as could be seen, was covered with a thick darkish yellow membrane. The countenance was very pale, and wore a very haggard expression; the pulse was very rapid and feeble, and there existed a marked croupy cough. Nothing, however, could save the child—it died the same evening. Early in the morning following, a child of the same family complained of sore throat. The tonsils and surrounding parts were congested. But nothing more was visible. A gargle of chlorate of potash was prescribed, and directions were left to feed up the patient well. On seeing the case again in the evening, he found an ulcerated spot about the size of a split pea on the left tonsil, to which he applied nitrate of silver. Chlorate of potash was then ordered internally, in addition to its use as a gargle. The next morning Dr. B. found that the ulcer referred to was larger than before, and there was also another of the same character on the tonsil of the opposite side. He applied the nitrate of silver again, and at the suggestion of Dr. Allin, hydrochloric acid was added to the mixture of chlorate of potash, in the proportion of a drachm of the former to two of the latter, in eight ounces of water: of this a teaspoonful was prescribed every two hours. I saw the case with him, continued Dr. A., a day or two after, and found that membrane had formed upon the surfaces of the ulcers referred to. The whole roof of the mouth was congested, but the membrane was confined to the uvula and parts immediately surrounding. The strength of the patient did not seem to be much impaired, the pulse being only 110, and we had strong hopes that the progress of the disease might be arrested. The next day, however, the child fell off in strength, and we discontinued the potash mixture, ordering instead, the tincture of the sesquichloride of iron, to be used both as an internal remedy and a local application. At the time referred to, a portion of the membrane became detached, and, on being removed by the forceps, was found to be very tough in consistence, very like the slough of a nitric acid issue in general appearance. Yesterday morning (Friday) I called again to find the patient suffering from a croupy cough, while the surface of the throat covered by the membrane, had increased very much in extent. The child became more and more prostrated, and died at six o'clock the same evening—ten hours after the first symptoms of laryngeal trouble showed themselves. In neither of the two cases reported were post-mortem examinations made.

Dr. Allin stated that Dr. Vedder (of Flushing) had also met with this disease. One case occurred in a child 18 months old, who sank rapidly and died in consequence of the appearance of croupy symptoms following an ordinary sore throat. The

treatment consisted in the internal administration of the sesquichloride of iron and the local application of hydrochloric acid. A post-mortem examination was made. The tongue, pharynx, and lining membrane of the œsophagus, down as far as the cardiac orifice of the stomach, was found covered with the characteristic membrane. It also formed a lining for the larynx and trachea, extending as far into the lungs as the minutest divisions of the bronchial tubes. The lungs aside from this, were only moderately congested. He stated that Dr. Vedder was treating, at that time, for diphtheria, a young girl 16 years of age, who was lying at the point of death. A blister was applied in one of Dr. Allin's cases, but the abraded surface was not covered with a diphtheritic membrane. In all the cases that recovered the convalescence was very much protracted.

Dr. A. C. Post referred to a case of this disease in a young woman, 21 years of age, which proved fatal in the course of the night in which she was attacked. Her child died a short time previous of the same disease. In both, the membrane made its first appearance upon the tonsils.

Dr. A. Clark had seen, since a year ago last autumn, somewhere between sixteen and twenty cases of diphtheria. The oldest case that he had seen prove fatal, was that of a lady, 22 years of age. The oldest person that he had seen affected with the disease was not over 36 years of age. But a small number of post-mortem examinations were made, but they were however sufficient to show a very great variety in the extent of the newly formed membrane. In some instances it extended throughout the pharynx, lining the larynx and trachea, and going down as far as the bronchial tubes could be conveniently opened, besides extending into the posterior nares. In one case this membrane could be seen from the front plunging up the nostrils. In other cases the larynx was not at all affected, the diseased action being confined to the pharynx and œsophagus. On the other hand, he had found the deposit confined to the larynx only. In some of the cases where no post-mortem examinations had been made, immense tubes or bands of thick leathery matter had been expectorated, but without being attended with any relief in the laryngeal symptoms, except in two instances, where recovery took place. In all the cases, so far as he had the means of knowing, the membrane was visible upon some portion of the fauces, most commonly upon one of the tonsils, before any symptoms of dyspnoea showed themselves, and before there were evidences of the formation of the deposit in any other part. In nearly one half the cases in which fatal results had occurred, such a

state of things took place without dyspnoea, but with a set of symptoms such as he could hardly compare with those of any other disease. There was muscular force enough, yet there was a very marked feebleness of the pulse, which was attended with blueness of the nails and lips. He thought that it was a condition very apt to deceive a physician who saw such a case for the first time, and lead him to suppose that recovery might take place. In relation to the mode of invasion of this disease, Dr. C. stated that it had been exceedingly variable. I should think, continued he, that in the cases that I have seen, the severity of the symptoms of invasion have had some relation to the age of the patient, being more severe in those that are older. I do not, however, wish to make this a statement, it only is the result of a limited observation. In some children the ordinary symptoms of sore throat first present themselves, the membrane forms slowly, but the issue in such cases is hardly less fatal than that of others. In other instances the invasion is very brisk, the patient has two or three chills in the course of the day, while in the more insidious forms referred to the duration is a fortnight including the early illness. In those cases that recovered the convalescence was very much protracted. In answer to a question from Dr. Post, he stated that he recollected one case that lasted but three and a half days.

Dr. McCready next cited the following case:—A patient of his, a child was first seized with the ordinary symptoms of sore throat. In the course of a day or two membrane showed itself upon the tonsils, but soon disappeared entirely, and everything pointed towards a recovery. After the lapse of about a week, however, membrane appeared in the nostrils, when the child became suddenly collapsed and died within twenty-four hours after. In that case it seemed that the disease disappeared from the tonsils and afterwards selected the nostrils as its seat.

Dr. Clark stated that in one case he saw with Dr. Crane, death took place in a somewhat similar way. All the membranes had been discharged and the boy was regarded as fairly convalescent. I visited the case one morning about ten days after the severe symptoms and thought him doing well. He was able to sit up a considerable portion of the day; his strength was increasing, and his friends were encouraged. About two o'clock of the same day, Dr. Crane was sent for, and found the child pale and sinking; the pulse at times would be scarcely perceptible, then it would become more full, but the exhaustion was so extreme that the slightest movement, even raising the head, would bring on a fainting fit. I arrived

in time to see the child breathe his last. His appearance at the time I saw him was that of a person dying from internal hemorrhage, and the history of the fatal attack tended to strengthen the suspicion. No autopsy could be obtained. In regard to treatment, Dr. Clark stated that when he first met the disease last autumn, the treatment was very varied and unsettled, and he was not satisfied with any method then in use. Seeing a statement that the Dublin and Edinburgh physicians were disposed to rely upon the muriated tincture of iron, he began to advise that remedy. He had since fallen into the practice, now generally adopted here, viz: sustaining the patient by quinia, given freely the muriated tincture of iron, wine, &c., and interfering but little with the membrane. He did not favor the use of mercurials on account of their constitutional effect. Bretonneau used them at first, but was forced to discontinue them for this reason. In reply to the question, whether he regarded diphtheria a different disease from the croup, Dr. Clark said that he did; one difference was the frequent occurrence of an abundant exudation in the substance and upon the surface of the membrane, and then the appearance of the membrane itself, the border of the patch being surrounded by an intensely red margin, giving it the appearance of a slough about to separate.

Dr. Buck said he had seen patients die even after the separation of the membrane. In reference to treatment, he stated that Dr. Lindsley's great reliance in these cases was mercurial fumigations. He had seen recoveries under its use, and in one, particularly, it was continued day and night for eight days. The disease seemed to be kept in check during its use, but any cessation in its application was followed by an aggravation of the most unpleasant symptoms, and it was not until the eighth day that the relief obtained was permanent. The convalescence was gradual and protracted. In this case the exudation on the tonsils was recognized at the first visit, and within twenty-four hours after hoarseness and laryngeal symptoms appeared. He was so favorably impressed with the value of his remedy that he advises its thorough trial. The fumigation was effected by enveloping the child's head with a blanket, and then heating an iron body to a red heat, throwing upon it cinnabar, when the whole was passed under the blanket. When the child was very small it was necessary that the attendant should also be subjected to the fumigation.

Dr. McCreedy said that he had seen a case with Drs. Parker and Van Buren which was successfully treated by the method of fumigation.

Dr. Jas. R. Wood remarked that Dr. Lindsley had used the

cinnabar in fumigation in croup for many years. He had himself tested its efficacy and could report favorably. Diphtheria, he continued, is a different disease from inflammatory croup, being attended with more nervous prostrations, and the patient running rapidly into a typhoid condition. It is essentially a blood disease. Again they differ in the location of the exudation; in true croup it does not always commence upon the fauces and extend unto the larynx; but in diphtheria he had always first discovered the exudation in the fauces or upon the tonsils, and the laryngeal symptoms supervened soon after.

Account of Diphtheritis, as it occurred on the Watershed between the Tallahatchie and Mississippi Rivers—By Lea Z. Williamson, M. D., of Sardis, Miss.—Diphtheritis occurred in the vicinity of Sardis, Miss., in 1859, and as this affection is now attracting much attention, I will endeavor to present an account of the symptoms which it presented, and the treatment which I found most beneficial, with such other information as may tend to throw light on the subject.

Symptoms.—Preliminary symptoms usually precede the attack in adults, sufficiently definite to apprise an intelligent person of his danger. These were a dull aching of the bones, lassitude, headache, great mental depression, and drowsiness. Children are emphatically the subjects of diphtheritis, and these initiatory signs are rarely observed in them. More commonly the child awakens in the morning, complaining of sore throat and stiffness of the cervical muscles; he seems very sleepy, insists on being let alone, and lies with his hands folded under his head. He has some fever, little or no appetite, and inspection reveals redness of one or both fauces, and sometimes of the uvula, and tumefaction of one or both tonsils. Perhaps the membrane has already formed on some of these parts, or does so in a few hours, sometimes it does not form until the third day. Externally there is swelling of the submaxillary and cervical glands, and the degree of this is a fair and correct exponent of the internal injury. Of fifty-eight cases, the left side was first effected in forty-four; in eleven only one side was implicated. The exudation commences in small, irregularly, whitish or ash colored patches, sometimes confined to a part of the fauces, or scattered here and there over their whole extent. If these patches coalesce, the whole mucous surface is concealed by the false membrane.

Occasionally the exudation appears first on the uvula. When

the surrounding surface is of a deep red, and the membrane of whitish color, the fever is sthenic; when the surface is a dark livid or claret, and the membrane of a yellowish color, the fever is typhoid; and when the latter condition succeeds the first, the prognosis is unfavorable. Between these two conditions, however, it must be remembered there are various grades wherein the characteristic symptoms are more or less mingled, and modified. We have not observed that constitution has any determining effect as regards the character of the fever.—In the majority of cases the fever was asthenic; whilst in some of the very worst cases, as regards the throat there was scarcely any fever perceptible. The membrane begins to be removed soon after it is completed, either in strips, or by softening and mixing with the fluids of the mouth. They are sometimes removed, and renewed several times; each time becoming thinner and whiter, and finally disappearing. The process lasts from five to ten days; the longer, the more unfavorable the prognosis; few recover that go to the tenth day. If it continue this long the fetid sanies from the nostrils, and the lacinating pain along the Eustachian tubes, when fluids are swallowed, indicate the extension of the inflammation into these passages, and there are reasonable apprehensions of the invasion of the larynx and trachea, which is the chief danger of the disease, and which will almost certainly prove fatal.

When the disease has advanced this far, the front of the neck, the parotid glands and the face are greatly swollen; the mouth cannot be opened without the most excruciating pain; the voice, although the tongue is not involved, is changed into a hoarse whisper; the swallowing of fluids, even, is torturing. The pulse is feeble and fluttering; the respiration is hurried and catching; the indentation of the intercostal muscles from atmospheric pressure shows a lack of oxygen in the lungs, for the relief of which the diaphragm and pectoral muscles are brought into full play. The patient is restless, tossing from side to side; implores the assistance of the bystanders, or a release from the agonies of suffocation; finally seeks a semi-reclining position, and dies by apnoea. The obstinate constipation so often present in the beginning, is exchanged for diarrhoea in the latter stages—the stools having a very offensive but not a cadaverous odor. Hæmaturia, difficult micturition, and suppression of urine are also common at this time. Albuminuria is detected by the usual tests in the severe cases; but cannot be considered a constant complication. In a few cases the serous effusion of the areolar tissue of the face, neck, and chest was so great as nearly to conceal the eye, and entirely incapacitate the patient from wearing his own clothes. One case had a

diphtheritic membrane, formed on an excoriated surface of left arm, which was very tenacious, and as tardy of being removed by the same remedies as that of the throat; which could not have come from a merely local affection.

The system is evidently under some poisonous influence, which has probably much to do with the fever of diphtheritis.

The prognosis was favorable in ordinary constitutions, if early treated. All the severe cases that were not treated till after the 2d or third day, died. All died that had a descent of the membrane into the larynx, with one exception. Of 58 cases, one was over 40, 5 over 30, 9 past 20, 16 over 14 years; the other 42 had not reached the age of puberty; 40 were under 10, and 20 of these between the ages of 4 and 6 years; the youngest was only 19 months old; no membrane formed in this case, though there was much inflammation and swelling. One third more females than males suffered. Color confers no immunity. 4 whites and three blacks died; one 30; two 8; one 6; two, 5; and one 4 years old. One died on the 18th, one on the tenth, one on the 9th, one on the eighth, one on the 7th, one on the sixth, and one on the third day.

Etiology.—Diphtheritis appeared here on a high, level water shed, between the Tallahatchie and Mississippi rivers. On each side are broad, uncultivated valleys, of matchless fertility, where grows vegetation of the richest and rankest character, which by the overflow going off in May or June, is left exposed and reeking in the sun. Superadded to this are numerous lakes, marshes, and sloughs, which are supposed to make this region notorious for intermittent and remittent fevers. This year (1859) the summer fever commenced early in June, and prevailed about as usual until August. The season was very dry, there having been no general rain since early in May. The thermometer ranged from 86° to 96° Fahr. In the last week of July there were copious rains, with frequent showers throughout August and September. With the rains came a decided change in the temperature, the thermometer ranging from 69° to 82°. The first cases occurred August 5; a week later half a dozen families were attacked almost simultaneously, without having had any communication with the first cases. It continued to travel in a definite direction along the eastern border of these table lands, confined to very narrow limits, from which it never once deviated. Remittent bilious fever, the only disease from which the inhabitants suffer during the summer months, and which had been prevailing to its usual extent, seemed now merged into the prevailing epidemic; after the appearance of diphtheritis, not one case of fever was seen in the epidemic region, where scores are wont

to occur. A few weeks later, diphtheritis appeared on the western border of this ridge (diphtheritis never reached its centre) fronting the Mississippi bottom, differing in no respect from that already described. On this basis it is a fair inference that in this epidemic malaria and diphtheritis were in some way connected. The epidemic began to abate in September; there were fewer attacks and those of a milder form. No rain fell after September 22 until Nov. 17. The weather was uniform, and warm for the season; this had a salutary effect. Patients were always worse during wet "spells," or when nights and mornings were very cool. Frequently those that had recovered, relapsed from exposure to cold, damp atmosphere. Diphtheritis being a disease heretofore unheard of in this section, the people were terrified with stories of contagion, for which there was barely the remotest evidence.

Diagnosis.—Diphtheritis has been confounded with scarlet fever, black tongue, mumps, croup, ulcerated and malignant sore throat. It wants the excavated surface of ulceration of the last named disease; when, however, the false membrane has been removed and renewed several times, some excavation will be observed.

Treatment.—I commenced this generally with purgatives to relieve the constipation. Where there is much fever, a hot surface and clay colored stools, good results usually follow the administration of calomel in broken doses, followed by a saline cathartic. Most cases thus treated exhibit some improvement on the second or third day. Mercury is preferred as a stimulant to the secretions, and as an antiplastic to the blood. Emetics are only useful for expelling the false membrane from the larynx in the last stages, thereby preventing suffocation. Iodide of potassium was given as an antiplastic, also the chlorate of potash for the same end, and to correct the fetor.—Huxham's tinc. bark and mur. tinc. iron were beneficial in the low and lingering cases. Chlorinated soda, a drachm to three ounces of water, is an excellent gargle. The application of nitrate of Silver, solid or in solution (a drachm to the ounce), to the inflamed surface, once or twice a day, was a prominent and indispensable part of the treatment in the severe cases. Externally, the most active counter-irritants are the best applications. The merits of flies, mustard poultices, stimulating lotions, and rubefacient liniments were thoroughly tested—the same arguments urged against blistering in other throat affections apply in this. Mustard vindicates itself from these, and is decidedly a superior application; and when added to Indian meal or wheat bran poultice, can be tempered to the patient's tolerance. It alleviates the internal pain, and controls to some extent the diphtheritic exudation.

Sequelæ.—In several cases serious secondary affections came on after the throat had recovered, characterized by universal paleness of the skin, lips, tongue, and mucous surface, and extreme whiteness of the conjunctiva. The muscles are soft and flabby; the patient is feeble; has a sort of random shuffling gait; cannot grasp and retain bodies by the hand. There is great mental depression, and disposition to sleep; constant constipation, feeble appetite, and digestion. Neuralgic pains of neck, shoulders, and body are common. In one case sight was so much impaired that large print could not be read, and the voice was nearly destroyed. The soft palate and uvula dangled in the pharynx like a dead curtain. The larynx of this person had been severely affected. All these cases recovered under rational treatment.--*Am. Jour. Med. Sciences.*

EDITORIAL.

Diphtheria.—Having received several letters from physicians in different sections of the country, stating that Diphtheria was more or less prevalent, and asking our opinions in relation to the treatment of that disease, we have thought it best to make some observations on that subject instead of the usual clinical reports. So far as experience has enabled us to form an opinion, we regard the Diphtheria as an affection intermediate between Scarlatina and Membranous Croup. Like the former, it usually commences with fever, but resembles the latter in the almost constant tendency to form false membrane, or at least curdy exudations upon the surfaces involved in the disease. Like the former, again, the fever seems constantly prone to assume an adynamic or typhoid grade of action, with a degeneration of the fluids, as indicated by the offensiveness of the secretions, especially from the mouth, fauces, and nostrils. In its sequela, also, it closely resembles scarlet fever, often leaving the patient anemic, with chronic suppurative inflammations of the mucous membranes, and lymphatic glands. On the other hand, it not only resembles membranous croup, in the tendency to plastic or fibrinous deposits on the inflamed surfaces, but also in its disposition to attack the larynx. From these facts, some writers have regarded the disease as only a modified form of inflammatory croup, while others have claimed

its identity with scarlatina. The larger number, however, regard it as a distinct disease, but closely allied in its pathology to both the others named. It is not necessary to occupy either time or space with a detail of the symptoms of diphtheria, to accomplish our present purpose.

It is sufficient to state very briefly our views of its pathology, and see how far a rational treatment can be founded on them. The disease involves primarily, an alteration in the composition and properties of the blood, with a perverted state of that property which we designate vital affinity in the organized textures, and the development of a local inflammation in the glands of the neck and mucous lining of the fauces.

The special changes observable in the composition of the blood, consist in the diminution of red-corpuscles and sometimes of the albumen; fibrine is much increased. The diminution of the two first is accompanied by a corresponding depression of vital activity, while the increase of the latter coupled with a perverted affinity, causes the ready exudation of a fibrinous layer upon the inflamed mucous membrane of the fauces, and often also upon cut or abraded surfaces in any part of the body; and it is doubtless a copious infiltration of the same fibrinous material into the texture of the tonsils and lymphatic glands that causes them to become so swollen and hard early in the progress of the disease. At a former period, the appearance of an excess of fibrine in the blood was universally regarded as an evidence of a sthenic or *actively* inflammatory condition, that constituent being regarded as one of the nutritive elements of the blood. But more than ten years since we satisfied ourselves by observations and direct experiments that it was a product of disintegration and consequently excrementitious, being chiefly eliminated by the kidneys. Hence instead of regarding its presence in excess, as an evidence of a sthenic state of the system with exaltation of the vital forces, we look upon it as simply indicating, either a too rapid disintegration of nitrogenous structures or a failure of the kidneys and skin to eliminate it with the usual rapidity, or both these conditions co-existing at the same time. Conceding these views to be correct, there is no difficulty in explaining

the co-existence of blood containing an excess of fibrine and a strong tendency to fibrinous deposits, with a perverted and depressed condition of the properties of the organized structures; thereby presenting all the phenomena of debility, depraved secretions, and a typhous tendency, together with excessive fibrinous deposits and exudations. And such really seems to be the exact pathological condition and tendencies in the majority of cases of well marked Diphtheria. It is true that we have seen some cases that have presented a full pulse, hot skin, and throughout a higher grade of action, resembling the ordinary inflammatory croup. But these are rather exceptions to the general rule.

Treatment.—The objects desirable to accomplish in the treatment of Diphtheria, are: 1st, to restore the normal condition of the blood by increasing the solubility and excretion of the fibrine, and thereby remove the tendency to further pseudo-membranous deposits in the fauces or elsewhere. 2nd, to correct the perverted properties of the solids and thereby restore a more healthy secretory action generally and arrest the febrile movement. 3rd, to mitigate the local inflammations.

If it is true, that fibrine is a product of disintegration or metamorphosis of the tissues, its accumulation in the blood may result from two causes; first, a too rapid metamorphosis or waste of tissues, as we see in all the more active local inflammations; second, a failure of the kidneys and the secretive organs to eliminate it as fast as it is formed. Hence to fulfil the first object in the treatment, we use such agents as will hasten the oxydation and excretion of the fibrine, without reducing the strength of the patient. For this purpose we give pretty freely, internally, the chlorates of Potassa and Soda, and if the disease advances with foetid secretions from the mouth and nostrils, we add the Muriated Tincture of Iron. To fulfil the second indication in the treatment, namely, to restore the vital properties to a normal condition, and thereby re-establish healthy secretion and remove the general febrile symptoms, we have been in the habit of giving, during the first day of treatment, between the doses of chlorate of Potassa, Calomel and Dover's Powder in alterative and anodyne doses, and

follow them on the second day by a mild laxative, simply sufficient to move the bowels. After this we give, alternated with the chlorates or the Muriated Tincture, the following:

R	Nitrous Ether,	℥ iss.
	Tinct. Gelsemin,	℥ ss.
	Tinct. Belladonna,	℥ i.

Mix, and give from 10 to 30 drops, according to the age of the patient, every three or four hours. The Gelsemin and Belladonna allay the general morbid excitability of the system, while the Nitrous Ether increases the eliminations from the skin and kidneys. To meet the third indication, *i. e.*, to counteract the local inflammation, we use a variety of local applications. In the first stage while the glands of the neck are swelling more or less rapidly, we keep the whole exterior of the neck thoroughly fomented with an infusion of Aconite leaves, holding in solution Muriate of Ammonia.

After the first day or two we change this for a liniment of Olive Oil ℥ ii., Oil Turpentine ℥ ss., and Chloroform ℥ ss., mixed and applied to the neck every two or three hours. In the first cases of the disease, that came under our care, we applied Nitrate of Silver and other active agents to the fauces and throat, but we did not derive that advantage we anticipated, and soon ceased using anything of the kind. We believe the solution of the chlorates and the diluted tincture of Iron, swallowed as internal remedies, come fully in contact with the fauces and constitute the most useful local applications—when ever the peculiarity of breathing and cough indicate the extension of the local inflammation to the Larynx, constituting the symptoms of *Croup*, we promptly give an emetic dose of Sub-Sulphate of Mercury (Turpeth Mineral)—and if necessary, repeat it every two or three hours until those symptoms are relieved. We had intended to add some further details in regard to the treatment of Diphtheria, but as the Printer is after copy, we will simply append the following letter received a few days since from Dr. Slack, of Indiana:

“Diphtheria here for the last six months. I have found no difficulty in curing every case, when called in the start. I saw three cases that had been treated by other physicians, that

proved fatal. I have only lost one case where I was the only one called, and that one only lived twelve hours after I first saw him. This disease is almost exclusively confined to children from two to ten years of age. I suppose I have treated over twenty cases, and when first called I generally find them making very little complaint. Examine their pulse, and I generally find very little excitement of the arterial system. Get them next to protrude their tongue, and it is almost invariably coated with a light yellow coat; next press the tongue down with a spoon handle, and you will see one or both tonsils enlarged, and in the centre of one or both, as the case may be, an ash colored ulcer or false membrane. The bowels are generally costive. I generally give them a good Cathartic of C. C. Pills, or if they are not old enough to swallow pills, I give a dose of Calomel, Rhubarb and Jalap; I then make a saturated solution of Nitrate of Silver, and apply it to the ulcerated tonsil twice a day with a swab. If the breath is much fœtid, I take a tea spoon full of the Chlorate of Potash and dissolve in half a tea cup of water, and wash the mouth and throat with that three or four times per day, but never fail using the Nitrate of Silver twice a day until the ulcer disappears. If there is much fever, after the bowels are well moved, I give a powder every three hours, composed of Dover's Powder, Nitrate of Potash and Jame's Powder. I have the throat extremely well bathed in a mixture of camphor, turpentine and lard, and if it is much inflamed and swollen, I also apply an aconite poultice. I find that they generally get well under this treatment, in from two, to four days.

Yours Very Truly,
GEO. W. SLACK.

CAFFEINE &c.

Our own experience fully confirms the following editorial from the Aug. No. of the *Southern Medical and Surgical Journal*, in relation to the use of Caffeine in counteracting the effect of Opium—and we have also found it very valuable as a nerve excitant in various conditions of disease, especially in

the stage of exhaustion from attacks of Cholera and Cholera Infantum :

CAFFEINE IN OPIUM-COMA. *The Second Case of the Injection of Caffeine, by the Rectum, in Extreme Narcotism of Opium.*
By HENRY F. CAMPBELL.

"In the May number of the *Southern Medical and Surgical Journal*, of the present year, we reported the particulars of a case of Opium-Coma, of a very grave character, in which *twenty grains of Caffeine*, injected into the rectum, produced the most surprising and satisfactory results. At the close of that former paper, we expressed the wish that some member of the Profession would repeat the treatment applied by us in that case, and either confirm or disprove our confidence in the remedy. The various medical journals of the country have commented upon the paper, and have generally approved the rationality of the measure, but, as yet, we have not been gratified by observing the report of any second trial of Caffeine under the circumstances, or any additional evidence in support of our favorable conviction in regard to the antidote. A case which occurred to us on the 10th of July instant, affords us the privilege of being able to report the second case of the application of Caffeine for Opium-Coma. Although the following case was not attended by the same happy results as that reported in our May number, we think that the details of the phenomena, so far from weakening our confidence in the remedy, will go far to confirm it.

July 10th, 1860, 3½ o'clock, P. M., called in haste to the U. S. Hotel, in this city, to visit a gentleman, said to have been found in a dying condition in one of the rooms. The patient was Mr. Moses Pike, aged about 28 years, of good constitution apparently, and well developed corporeally. On entering the room, we found him in the following condition: He was entirely unconscious; face of a dark purple hue; hands and feet also purple from congestion; nails on fingers and toes of an indigo color. There was also patches of venous congestion, presenting a darkened hue all over the surface. His respiration was fearfully slow when counted, *not quite four to the minute*. The attendants were slapping and shaking him each

time between the inspirations, to excite him to breathe. His respiration seemed greatly obstructed by the accumulation of mucus. Pulse very feeble, and about 100 per minute. The muscular system was completely relaxed, so that his head would fall about by its own weight, and his arms and legs obeyed only the influence of gravity.

Immediately on our arrival, a paper was found, on which the unfortunate man had recorded the fact that he had taken laudanum at 12 o'clock the night previous, with the intention of self-destruction. Two empty vials, labelled laudanum, one of two ounce capacity, the other of one ounce was found on the table. One of these vials had the neck knocked off, apparently with the view of opening it hastily—and some of the laudanum had escaped so as to leave a stain upon the label. It is probable, therefore, that the entire three ounces had not been taken. Once or twice during the morning, the servant stated, that he had approached and tried the door, with the view of entering, but had desisted when he heard the occupant snoring deeply, as he did not wish to disturb him. Somewhat after 3 o'clock P. M. the servant became alarmed and looked into the room through the transom-light from a chair, and observing his condition, called for assistance.

From the above circumstances, as well as from the written statement of the patient, it was highly probable that near 3 ounces of laudanum had been in his system nearly fifteen hours—that so large an amount had not produced death in so long a time, is truly unaccountable.

The condition of the patient, the necessity of constantly provoking respiration, and also the little probability that any laudanum yet remained in his stomach, caused us to abandon the idea of using the stomach-pump. Emetics of course were out of the question, and we at once resorted to the application of ice to the scalp, and pouring ice-water, from a distance, upon the head, while we sent for a drachm of Caffeine, and a small syringe. As soon as these arrived, we poured out in the palm of the hand what we supposed to be about twenty grains of Caffeine, desolved it in two ounces of cold water, and introduced it into the rectum by means of the syringe.

The syringe being small, three applications were made at short intervals. The whole of the alkaloid was not dissolved. By an estimate made subsequently, calculating what had been lost, the patient had taken near *twenty-five grains of Caffeine* in the three applications.

The Caffeine was administered at twenty minutes before four o'clock, at which time, as we have said, the respiration of the patient was *scarcely four to the minute*, and constant efforts were necessary, in the way of slapping and shaking to provoke him to inspire. At fifteen minutes after four, (35 minutes after the injection) his respiration was found to be effected with less effort and more regularly—and, on counting it by the watch, it numbered eight to the minute. The skin, even now, began to present less of the cerulean tint. In one hour after, the respiration had risen to twelve, and shortly rose to sixteen to the minute, when the skin was nearly of the natural hue, though the nails on both hands and feet remained still of a purplish cast.

Slight spasmodic movements in the fingers were now observed, and also some occasional subsultus in the muscles of the forearm—the under lip, which before was hanging, now became elevated and slightly compressed against the teeth. When the hand of the patient was held, and an attempt made to extend the arm at the elbow, decided muscular resistance was observed. The lid of the left eye was also observed to be raised and let down rapidly once or twice.

The pulse had now become full and somewhat resisting, and the action of the heart, as observed at the chest, tumultuous. On being raised, the patient, once, made a noise slightly resembling a groan, but from the beginning to the end, he did not once manifest the least consciousness.

For a short time after the improvement in the respiration began, the mucous rale seemed somewhat to diminish, and his breathing, were it not for a certain jerking, resembled very nearly a man in deep, healthy sleep. The rale now, however, (half-past 7 o'clock) became more and more obstructive, the gurgling reaching up into the throat and threatening momentarily to strangle the patient. It was now plain that he could

not survive, and, on turning him upon the right side, a bloody mucus bubbled out of the nostrils. The number of the respirations was at this time twenty to the minute, when counted by the watch. The entire surface of the body was intensely hot and remained so to the time of the patient's death, which took place about 15 minutes before nine o'clock, P. M. He seemed to die from the accumulation of the bloody mucus, in the bronchial tubes and larynx. During the whole time, from the first moment of our seeing him till the time of his death, the application of ice was made constantly to the head of the patient, and also mustard plasters were applied to the spine and to the extremities.

A superficial glance at the foregoing case might perhaps impress the reader with the conviction that the confidence which we expressed, in our former report, in Caffeine as an antidote in Opium Coma, was somewhat hasty and misplaced. A more deliberate consideration, however, will remove such an impression. When we reflect on the amount of the opium taken, the length of time during which the patient had been left to its toxic influence, and the destructive ravages which had been made during that time, we certainly, on the other hand, must feel great surprise at the amount of modification the Caffeine was seen to produce under such disadvantageous circumstances. The respiration, in a space of time, less than one hour, was raised from four to sixteen in the minute. The color of the skin, under its influence, was changed from an almost indigo hue, to that of the natural complexion, and the muscular relaxation was replaced by a fair degree of tonicity accompanied by occasional twitchings. The mode of death, too, was not such as is seen in the demise from the unmodified effects of opium, when the respiration becomes gradually slower and slower till it ceases altogether, but at the time of our patient's death, his respiration numbered twenty per minute, and he died apparently *drowned* by the accumulation of the viscid mucus in air-passages, doubtless the result of the long enduring pulmonary congestion occurring previous to the administration of the Caffeine.

In conclusion, we feel confident in saying that we feel greatly

encouraged by the developments of this second case, and shall use the remedy hereafter, with even more confidence than before. We again express the hope that some of our professional brethren will add their published testimony to ours so as to establish the true amount of value that should be attached to Caffeine as an antidote in Opium-Coma.

We intend shortly reporting the results of experiments, with the two drugs, Opium and Caffeine, as made by us, on the lower animals.

Messrs. J. H. REED & Co., whose card will be found on the cover of the "Examiner," have recently fitted up rooms over their store exclusively for their *Surgical and Dental Instruments*. They have been compelled to make this change owing to the increase in trade in these goods, as also the necessity of more room to exhibit properly their large stock of Instruments. They keep every thing needed by the professions, and have now a better arrangement for showing new instruments and improvements. They have arrangement with Messrs. Teimann & Co. to receive all new instruments as they are brought out, and will be pleased to show their stock whether parties wish to purchase or not.

LARGE CHILD.

Mrs. Wilkinson Confined July 28th, 1860. Child, female. Distance around breast immediately under the arms 15 inches; around arm $5\frac{1}{2}$ inches; around thigh $8\frac{1}{2}$ inches; around pelvis 15 inches; shortest circumference of head $14\frac{1}{2}$ inches; whole length from crown of head 24 inches; weight dressed $13\frac{1}{2}$ pounds. For fear some would make to much deduction for clothes, I took the precaution to have the child weighed without clothes, and it was $12\frac{1}{2}$ lbs. The parents each weigh 195 lbs., and the labor terminated without operative interference.

N. HOLTON, M. D.

Buda, Ill., July 30th, 1860.

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